



National Fisheries Information System

InPort

InPort Catalog User Guide





InPort Catalog User Guide NOAA Fisheries, National Fisheries Information System

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11 04 2005



Contents

| 1. | Introduction• 1 |
|----|--|
| | Overview |
| | InPort Support |
| | Reporting Issues |
| | Technical Support |
| | Metadata Assistance |
| | InPort Functions |
| | Catalog Administration |
| | Catalog Maintenance |
| | Catalog Publication |
| | Catalog Extractions |
| | InPort Catalog Content |
| | Catalog Hierarchy |
| | InPort User Roles and Responsibilities |
| | InPort User Roles for Administration |
| | InPort Administrators |
| | InPort Librarians |
| | InPort Data Stewards |
| | InPort User Roles for Publishing |
| | InPort Publishers |
| | InPort Authors |
| | InPort Readers |
| | Metadata Quality Controls |
| 2. | Getting Started• 9 |
| | System Requirements |
| | Browser Plug-in Configuration |
| | Accessing the InPort Web Site |
| | Accessing InPort Applications |
| | InPort Catalog Tools Menu |
| | InPort Application Screens |



| | Application Layouts | |
|----|--|--|
| | Header | 16 |
| | Editor Pane | 17 |
| | Navigator Pane | 18 |
| | Application Help | 9 |
| | Tab Screen Help | 9 |
| | Field Item Help | 0 |
| | Tool Tips | !1 |
| | Application Tips | 2 |
| | Menus | 22 |
| | List Items | 22 |
| | Cutting and Pasting | 23 |
| | Expanding Edit Fields | 23 |
| | Closing Pop-up Windows | 23 |
| 3. | Catalog Administration 2 Overview | |
| 3. | Catalog Administration• 2 | |
| 3. | Catalog Administration• 2 Overview | 25 |
| 3. | Catalog Administration• 2 Overview | 25 |
| 3. | Catalog Administration• 2 Overview | 25 25 25 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 | 25 25 26 |
| 3. | Catalog Administration• 2 Dverview 2 InPort Library Setup 2 InPort User Setup 2 | 25 25 26 26 |
| 3. | Catalog Administration 2 Overview | 25 25 26 26 27 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 Library Manager Tool Functions 2 Organization Tab 2 | 25 25 26 26 27 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 Library Manager Tool Functions 2 Organization Tab 2 Library Tab 2 | 25 25 26 26 27 29 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 Library Manager Tool Functions 2 Organization Tab 2 Library Tab 2 Person Tab 3 Organization Assignment Tab 3 | 25 25 26 26 27 29 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 Library Manager Tool Functions 2 Organization Tab 2 Library Tab 2 Person Tab 3 Organization Assignment Tab 3 | 25 25 26 27 29 30 32 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 Library Manager Tool Functions 2 Organization Tab 2 Library Tab 2 Person Tab 3 Organization Assignment Tab 3 InPort User Roles Tab 3 | 2:5 2:5 2:6 2:6 3:17 3:13 3:4 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 Library Manager Tool Functions 2 Organization Tab 2 Library Tab 2 Person Tab 3 Organization Assignment Tab 3 InPort User Roles Tab 3 InPort User Account Management 3 | 125 125 126 126 127 129 132 133 134 |
| 3. | Catalog Administration•2Overview2InPort Library Setup2InPort User Setup2Library Management2Library Manager Tool Functions2Organization Tab2Library Tab2Person Tab3Organization Assignment Tab3InPort User Roles Tab3InPort User Roles Tab3InPort User Role Management3InPort User Role Manager3 | 25 25 26 26 27 29 30 33 34 36 38 |
| 3. | Catalog Administration•2Overview2InPort Library Setup2InPort User Setup2Library Management2Library Manager Tool Functions2Organization Tab2Library Tab2Person Tab3Organization Assignment Tab3InPort User Roles Tab3InPort User Role Management3InPort User Role Manager3Creating InPort User Role Requests3 | 25 25 26 26 27 29 30 32 33 34 36 38 |
| 3. | Catalog Administration• 2 Overview 2 InPort Library Setup 2 InPort User Setup 2 Library Management 2 Library Manager Tool Functions 2 Organization Tab 2 Library Tab 2 Person Tab 3 Organization Assignment Tab 3 InPort User Roles Tab 3 InPort User Role Management 3 InPort User Role Manager 3 Creating InPort User Role Requests 3 Authorizing or Rejecting an InPort User Role Request 3 | 25 25 26 26 27 29 33 34 46 38 39 |



| Catalog Editor | l3 |
|--|----------------|
| Catalog Item Identification | 14 |
| Catalog Item Types | 1 5 |
| Project | 15 |
| Data Set | 50 |
| Data Entity | 52 |
| Data Attributes | 54 |
| Document | 57 |
| Procedure | 59 |
| Data Collection Item | 51 |
| Catalog Detail Modules | 54 |
| Related Items | 54 |
| URLs | 56 |
| Time Frame Module | 57 |
| Geographic Area Module | 58 |
| Support Roles Module | 58 |
| Issues Module | 59 |
| Data Quality Module | 70 |
| Technical Environment Module | /2 |
| Data Access Module | /3 |
| Downloads | 74 |
| FAQs | 15 |
| Acronyms | 76 |
| Glossary Terms | 16 |
| | _ |
| | 9 |
| Catalog Publishing Workflow Overview | |
| Catalog Workflow Control States | |
| Catalog Item Workflow Rules | |
| Catalog Hierarchy Workflow Rules | |
| Draft to Review/Revise | |
| Review/Revise to Approved | |
| Approved to Published (internal or external) | |
| Published-Internal to Published-External | 32 |



| | Published (internal or external) to Withdrawn | 82 |
|----|---|-----------|
| | Withdrawn to Approved | 82 |
| | Approved to Review/Revise | 82 |
| | Withdrawn to Review/Revise | 82 |
| 6. | Catalog Searching• 8 | 37 |
| | Internal vs. External Publication | 87 |
| | Catalog Search Process | 87 |
| | Text string search | 88 |
| | Search Results Page | 89 |
| | Catalog Item Summary | 90 |
| | Catalog Item Details | 91 |
| | Catalog Hierarchy Drill Around | 92 |
| 7. | Catalog Batch Loading• | 95 |
| | Interface to Oracle Databases | 95 |
| | Stage 1 - Creating the Extract File | 95 |
| | Prerequisite and Assumptions | 95 |
| | Summary of Steps | 96 |
| | Extract Steps | 97 |
| | Script Notes | 01 |
| | Stage 2 Uploading the extract file | 02 |
| | Prerequisites | 03 |
| | Summary of Steps | 03 |
| | Stage 3 Edit/Validate the Upload Batch File | 03 |
| | Prerequisites | 04 |
| | Summary of Steps | 04 |
| | Stage 4 Copy Batch File to InPort Catalog | 04 |
| | Prerequisites | 05 |
| | Summary of Steps | 05 |
| A | opendix A - Glossary of Terms• 10 |)9 |
| | General Terms | 09 |
| | Catalog Item Types 1 | 10 |



| Appendix F - InPort FAQs• | 125 |
|---|-----|
| Appendix E - InPort Library Request Form• | 123 |
| National Fisheries Information System | 121 |
| Appendix D - National Fisheries Information System• | 121 |
| IIIDUUIIU | 110 |
| Inbound | |
| Outbound | |
| InPort Interfaces | |
| Basic Design | |
| Uses Oracle Text | |
| Uses Oracle XML API | |
| Database | |
| Main Applications | |
| Data Entry and Publishing | |
| Future: Advanced Search | |
| Internal/External Search | |
| Simple Search | |
| Search and Retrieve | |
| Major Components | |
| InPort Technical Environment | 116 |
| InPort Technical Overview | 116 |
| Appendix C - InPort Architecture• | 115 |



How To...

| How to Get and Install Jinitiator |
|---|
| How to Log into the InPort Web Site |
| How to Create a New InPort Library |
| How to Set Up InPort Users |
| How to Register an Organization |
| How to Register a Library |
| How to Register a Person |
| How to Move a Person to Another Organization |
| How to Assign a Person to Additional Organizations |
| How to Create a New InPort User Account |
| How to Change an InPort User's Password |
| How to Lock or Unlock an InPort User Account |
| How to Create an InPort User Role Request |
| How to Complete a Pending User Role Request |
| How to Deactivate or Reactivate an InPort User Role |
| How to Generate a User Roles Report |
| How to Create New Catalog Items |
| How to Move a Catalog Item to a Different Parent Item |
| How to Document a Project, Program, Task, or Activity |
| How to Catalog a Data Set, Database, or File Collection |
| How to Catalog a Data Entity with Data Attributes |
| How to Catalog a Document |
| How to Catalog a Procedure |
| How to Catalog a Data Collection Item |
| How to Create Related Items |
| How to Create URLs |
| How to Change a Catalog Item's Workflow Control State |
| How to Edit a Published Catalog Item |
| How to Create the Extract File - Stage 1 Batch Loading |
| How to Upload the Extract File - Stage 2 Batch Loading |
| How to Edit/Validate a Batch Unload File 104 |



ix



| How to Import Batch data into the InPort Catalog $\ \ . \ \ .$ | | | | | | | 10 |
|--|--|--|--|--|--|--|-----|
| How to Re-import Batch data into the InPort Catalog. | | | | | | | 105 |



Figures

| nPort Functional Areas |
|--|
| nPort Catalog Hierarchy |
| nPort User Roles |
| nPort Home Page |
| nPort Login Page |
| nPort Publishing Page |
| nPort Account Management Page |
| nPort Catalog Tools Login Screen |
| nPort Catalog Tools Menu Screen |
| example of an InPort Application Screen (Catalog Editor) |
| example of an InPort Application Editor Pane - Catalog Editor |
| example of an InPort Application Navigator Pane - Catalog Editor |
| Tab Screen Help |
| Field Item Help |
| Field Item Tool tips |
| nPort Library Manager Tool |
| ibrary Manager - Organization Tab |
| ibrary Manager - Library Tab |
| ibrary Manager – Person Tab |
| ibrary Manager - Org. Assignment Tab |
| ibrary Manager -InPort User Tab |
| nPort User Manager - New User |
| nPort User Manager - Existing User |
| nPort User Role Manager |
| Jser Role Manager – New Role Request |
| nPort User Role Manager – Pending Request |
| nPort User Role Manager - Inactive Role |
| nPort User Roles Report |
| Catalog Editor – Item Identification Tab |
| example of a Library hierarchy with multiple levels of Projects |
| Example of catalog Projects in a Library hierarchy 47 |





| Table/Column Loader - Catalog Tab | 105 |
|-----------------------------------|-----|
| FIS InPort | 115 |
| FIS Model | 121 |
| InPort Library Request Form | 123 |











1. Introduction

Overview

The FIS InPort Catalog gives NOAA Fisheries and its state and regional partners the capability to share essential information about fisheries data. InPort stores metadata, information about data. InPort, for example, can help answer the following questions:

- What logbook data exist for US fisheries?
- What time periods and geographic areas are covered by the logbook records?
- Who controls the data and how do I contact that individual or organization?

InPort (Information Portal) is one of the initial, bootstrap systems planned for the National Fisheries Information System (FIS) to give NOAA Fisheries and its partners the capability to catalog and search fisheries data holdings. The InPort data catalog can contain the information needed to understand and use fisheries data. InPort does not store fisheries data itself.

InPort will store metadata, information about data. This will include descriptions of structure and content. InPort will not, however, store any of the data. For example, it might say that SEFSC has logbook data from 1986 to the present and describe tables and column descriptions. But InPort will not store the logbook data. In InPort, metadata includes information that helps explain what is *in* the data and *how to use* the data.

InPort should include the "what, where, when, how, and who" about data holdings. InPort should store details on the quality and completeness of data, its confidentiality policies, research models, methodologies and usage constraints. It should also explain if the data is accessible, if there are any constraints on its use, and who to contact about getting the data.

InPort should function much like a library card catalog. A card catalog describes each book in the library by title, author, publisher, and publication date. It also contains a reference number to locate the book among the book shelves. By comparison, InPort should have titles, authors, publishing organizations, publication dates, and whom to contact if you wanted to use the information. InPort will also contain other details about the structure of the data.

InPort was originally described in 2003 and was funded in May 2004 under the FIS Program. See Appendix D for more information on FIS.



InPort Support

The initial roll-out of InPort, the database, web servers, and support staff will be at the NOAA Fisheries Service, Pacific Islands Fisheries Science Center. InPort will reside at the NOAA Fisheries, Office of Science and Technology in Silver Spring, MD.

Reporting Issues

Reporting of issues, comments, and ideas for improving InPort are greatly encouraged. An email link to the InPort team can be found at the bottom of the InPort web pages and this document. The design of InPort has been a collaborative effort within the National Fisheries Information System Program and additional comments and feedback will ensure that our Fisheries partners benefit from its use.

Technical Support

For technical assistance on web or browser technical problems, or for obtaining your account password, please contact InPort Support at:

Tel: 808.983.5387Fax: 808.983-2922

• Email: inport.devteam@mail.nmfs.hawaii.edu

Metadata Assistance

There are a multitude of resources on how to document data and we include some of those references in Appendix B. Please note that most metadata tutorials focus on documenting data end products such as maps, images, reports, and data download files. While InPort was designed to facilitate the generation of FGDC metadata records which can be submitted to metadata repositories such as the Coral Reef Information System (CoRIS) and the FGDC Geospatial Data Clearinghouse, InPort is focused on managing information about the entire life-cycle of our data collections, from which many data products are produced and distributed with its appropriately formatted metadata record. That metadata record will most typically be in FGDC, NASA, or Dublin Core format.

InPort Functions

InPort is described as a data catalog which holds descriptions of fisheries related data. For example:

- Pacific Islands logbook data, 1990 to present
- Southeast Region landings data, 1960 to present
- N and S Pacific Albacore Troll and Bait Boat (1952 to present)

The InPort catalog is comprised of many individual Metadata Libraries. A Metadata Library is associated with one organization though the Organization-Library pair may have sub-organizations under them. Libraries contain details about an organization's information items, including projects, data sets (databases), and data entities (e.g., tables, files, data reports, etc.), documents, and procedures. Each item in the Library hierarchy is called a *Catalog Item*. The Library itself can be thought of as the root-node or base of the hierarchy.

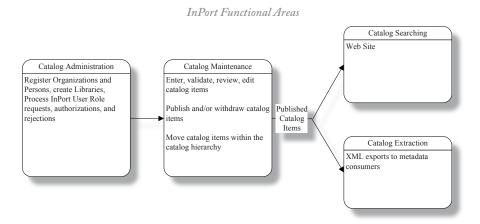
The InPort Catalog also maintains information about the people and organiza-



tions that support the individual information items, called Catalog Items, being cataloged and as InPort Users and Organization that support the InPort Catalog system.

Catalog Items may be described in more detail by standard, descriptive modules called Detail Modules (e.g., time frames, geographic areas, attributes, etc.).

The InPort system maintains functions for administration of InPort persons and organizations and for the maintenance, searching, and extracting of catalog metadata.



Catalog Administration

InPort **Catalog Administration** includes those tasks performed by the InPort Administrator to create Metadata Libraries, manage Metadata Librarians assigned to each Library, and manage reference code lists that support the Catalog. The InPort Administrator also defines the publication workflow and catalog hierarchy rules.

Library Administration includes those tasks performed by the Metadata Librarians to process new InPort users and user accounts for their InPort Library. Librarians are also responsible for maintaining a high level of quality and consistency in cataloging and describing their organization's information items.

Catalog Maintenance

InPort Catalog Maintenance includes those tasks performed by a Library's Librarians, Authors, Publishers, and Readers to enter, validate, review, edit, and approve the metadata for Catalog Items. Catalog Items may also be moved within a catalog hierarchy, depending on the item's publication workflow state (e.g., an item cannot be moved if it is currently published).

Catalog Publication

InPort currently supports three levels of **Publication** of Catalog Items:

- 1. Unpublished but accessible to the item's Library users through the InPort tools.
- 2. Published (Internally) and InPort web accessible only to the InPort user community (i.e., requires login).



3. Published (Externally) and InPort web accessible to the public (no login required).

Catalog Extractions

Besides the main function of InPort to maintain complete details and history of an organization's information items, metadata in InPort will be extracted to support web portals, metadata servers, and other metadata consumers. This approach will ensure that metadata is maintained in a single repository and that metadata extractions will provide the most currently published information about the information items of interest.

InPort Catalog Content

Each **Catalog Item** is significant as metadata information needed to describe an information item. There are many different Catalog Item types.

- Metadata Library(*)
- Project
- Data Set
- Data Collection Item
- Data Entity
- Document
- Procedure

See InPort Glossary for definitions or refer to the Catalog Maintenance section of this user guide for details on each catalog item type.

- (*) The Metadata Library is a special Catalog Item that represents all the currently cataloged data collection activities of an Organization.
 - Each organization may have one and only one Metadata Library.
 - All the metadata for an organization is arranged under its Metadata Library hierarchy
 - Metadata Libraries are "root" catalog items for catalog hierarchy trees

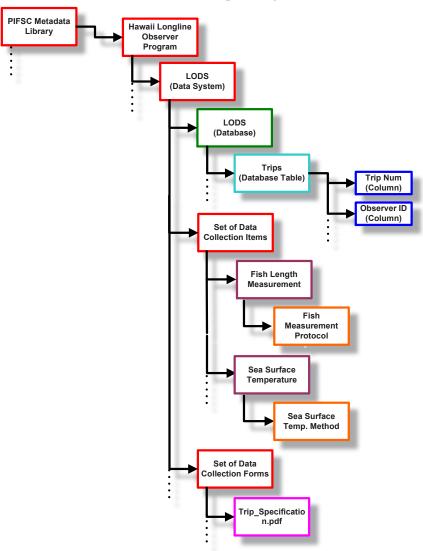
Catalog Hierarchy

Catalog items may be organized in a hierarchy according to the following rules:

- Each catalog item may belong to one-and-only-one parent catalog item
- Each catalog item may be the parent of one or more catalog items
- Each catalog item may not be the parent of itself







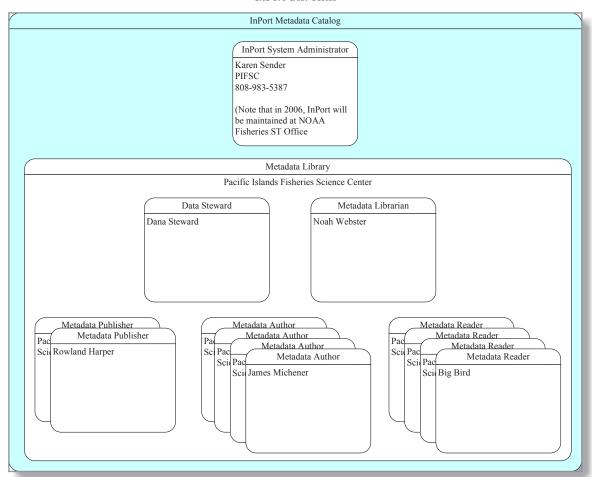
The InPort Catalog organizes Catalog Items in a hierarchy.

InPort User Roles and Responsibilities

In its current configuration, InPort supports three types of users to administer the InPort system and Libraries and three types of users for publishing items in the catalog.



InPort User Roles



There are currently six different access roles in InPort. These access roles ensure that InPort users have access and editing capabilities that are set by the local InPort Librarians.

InPort User Roles for Administration

InPort Administrators

InPort Administrators have sole authority to define and maintain catalog workflow (control states, InPort user roles), and manage reference codes.

It is the InPort Administrator who can create Master (root-level) Organizations and their InPort Metadata Libraries, and create and manage their Librarian and Data Steward accounts.

InPort Librarians

An InPort Librarian can create and manage catalog Persons and InPort user accounts for their Metadata Library. Librarians can create and manage catalog project access requests, authorizations and rejections.

Librarians create new organizations under their Organization and can create and manage catalog project folders under their Metadata Library.



InPort Data Stewards

InPort Data Stewards have the same catalog privileges as an InPort Reader but have the ultimate responsibility of authorizing or rejecting InPort Catalog Access Roles.

InPort User Roles for Publishing

InPort Publishers

InPort Publishers manage the review of metadata and ensure that quality assurance processes are completed. Publishers should give feedback and advice to InPort Authors on metadata quality and sufficiency.

Publishers are responsible for web publication, either internally or externally, and for withdrawing metadata for correction or further review. Publishers will monitor metadata issues activity and ensure that issues resolution occurs in a timely fashion.

InPort Authors

InPort Authors enter, review, and correct metadata that is in a Draft state in the Library or catalog Project for which they have been granted an Author Role. Authors have authority to put metadata into Review/Revise state at which point the Author will no longer have edit capabilities. Authors are responsible for requesting publication review for that metadata from their Catalog Publisher.

InPort Readers

InPort Readers review catalog items through the Catalog Editor or log onto the InPort web site to search and view internally published catalog items. Readers do not have any edit abilities. Readers are responsible for reporting any metadata issues.

Metadata Quality Controls

Every effort is made to ensure that metadata for all Catalog Items is of the highest quality. Measures taken in this regard include:

- Audit fields for each metadata record which show who and when metadata records were created or modified
- Record and field item history tracking
- Tightly controled metadata approval and publication process (workflow control) that is dependent upon InPort User Roles
- Metadata cannot be edited either in Approved or Published state without first being Withdrawn from publication and/or being placed back in Review/Revise state.
- Metadata Review Date support to enforce annual review of metadata for continued publication.





2. Getting Started

System Requirements

Users will need to access InPort applications with one of the following internet browsers:

- Internet Exploror 6.0 (with Windows XP)
- Internet Explorer 5.5 or greater (with Windows 2000 or NT)
- Mozilla Firefox (requires JInitiator and additional configuration (see below)
- Netscape 4.7.x

Browser Plug-in Configuration

Users of the Mozilla web browser, or browsers such as Firefox descended from Mozilla, will need to follow a few extra steps to download and install JInitiator on their local computer before accessing InPort applications.

How to Get and Install Jinitiator

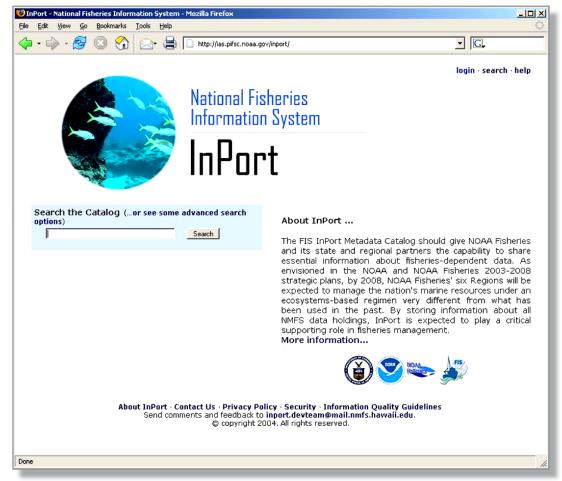
- Downloading Jinitiator using your browser, go to the following URL: http://ias.pifsc.noaa.gov/tools/jinit_download.htm
- 2. Click on Download Oracle Jinitiator xxxx (where xxxx in the version number)
- 3. Save jinit.exe. A window appears to allow you to save the file jinit.exe. Click *OK*. If you have not changed the directory to which files will be saved, the file will be saved to your Windows Desktop.
- Install Jinitiator Exit your browser, go to your Windows
 Desktop, and double-click on the jinit.exe icon. This will install
 Jinitiator into the directory of your choice. Follow the on
 screen instructions.
- 5. Once Jinitiator is installed, you can open your browser, access the InPort web site, and use InPort to publish your metadata.

Accessing the InPort Web Site

https://ias.pifsc.noaa.gov/inport



InPort Home Page



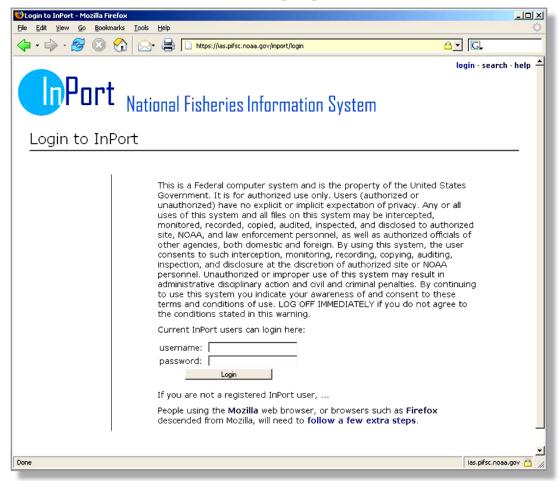
The InPort Home Page is publicly accessible for searching externally published metadata and for finding out information about the InPort system.

The InPort home page displays the current message of the day and the InPort Search text box. There is also a link for InPort User login and other links for accessing more information about InPort.

It is not necessary to have an InPort user account to search for catalog items that are published to the public (in InPort terms, Published-Externally). However, to search for catalog items that have restricted publication (in InPort terms, Published-Internally), a user login with an InPort username and password, is required. After logging in, an InPort search will return all published (Internally or Externally) catalog items. Logging in to InPort will also make the various InPort Catalog tools available to the user.



InPort Login Page



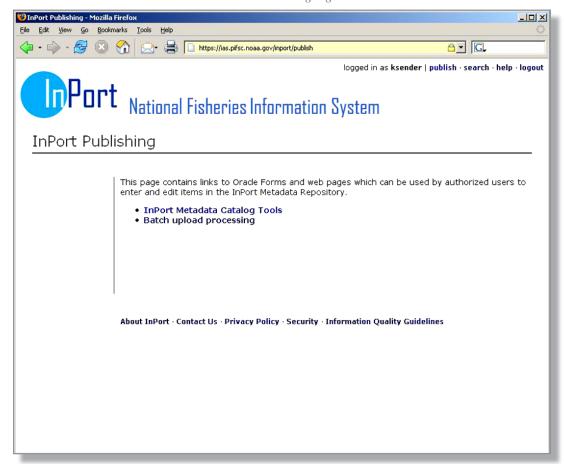
The InPort Publishing Page provides links to the tools for creating, managing, and publishing metadata.

How to Log into the InPort Web Site

- Click the **login** link in the upper right-hand corner of the InPort home page
- Enter your InPort username and password (if you do not have an InPort user account, you may contact the InPort Administrator to obtain one.
- 3. Click the *Login* button. This will open up the InPort Publishing page



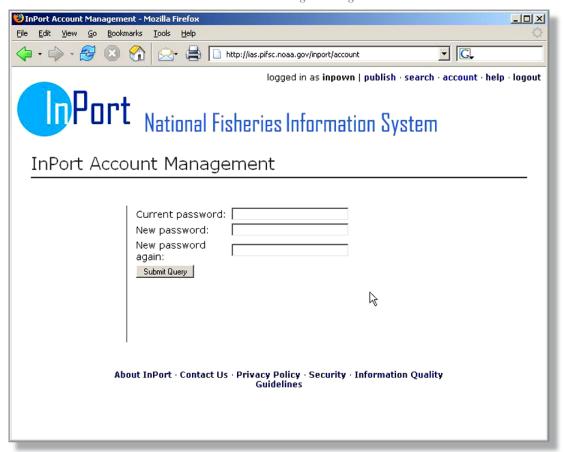
InPort Publishing Page



The InPort Publishing Page provides links to the tools for creating, managing, and publishing metadata.



InPort Account Management Page



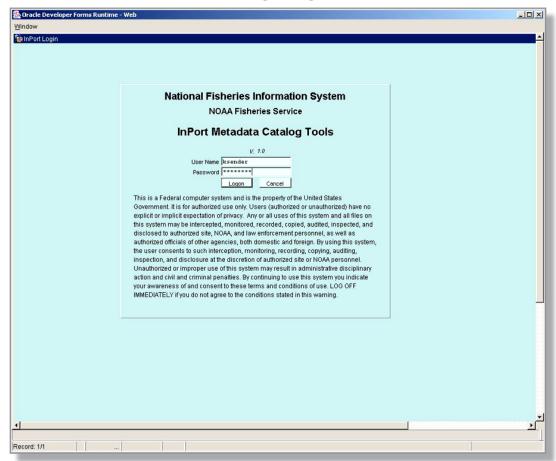
InPort users can change their login password from the InPort Account Management page which is available after logging in to the web site. InPort Librarians can also manage their user's InPort accounts using the Library Manager tool.

Accessing InPort Applications

Clicking on the InPort Catalog Tools link on the InPort Publishing page will display the application's login screen. The InPort user will be required to enter his/her username and password even though they have already logged into the InPort web site.



InPort Catalog Tools Login Screen



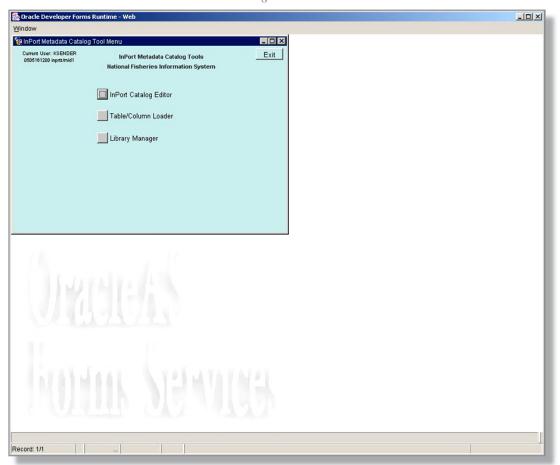
Even though the user has already logged in to the InPort web site, the user will still have to log in to the InPort Applications.

InPort Catalog Tools Menu

After entering a valid username and password, the InPort Catalog Tools menu will provide access to the applications to which the current user has authorized access. An InPort Librarian will have more tools available than an InPort Author, who in turn will have more tools than an InPort Reader.



InPort Catalog Tools Menu Screen

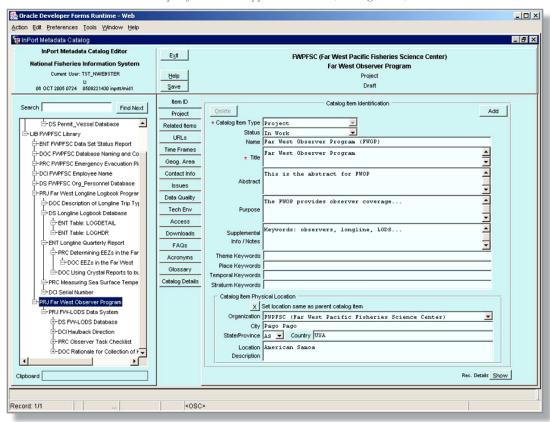


The InPort Catalog Tools Menu is sensitive to the Catalog Access Role of the currently logged in user and will thus only allow access to the tools appropriate for that user.



InPort Application Screens

Example of an InPort Application Screen (Catalog Editor)



InPort applications try to have a consistent look-and-feel and layout to help the user' understand the tools.

Application Layouts

Header

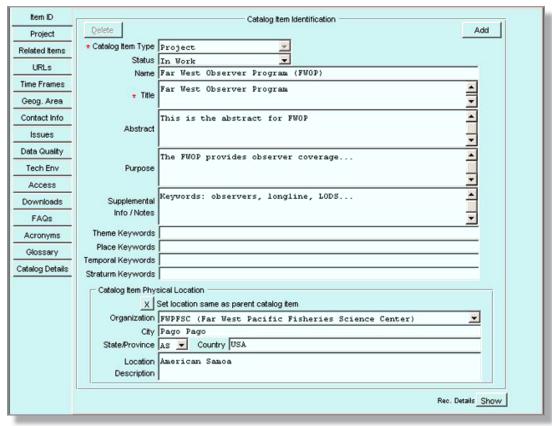


The application Header panes will show the names and titles of the objects in the Editor pane. Information on the left side of the Header panes will show the current application, current user, publishing state of the item, date and time the user logged in to the application and the database and server names.



Editor Pane

Example of an InPort Application Editor Pane - Catalog Editor

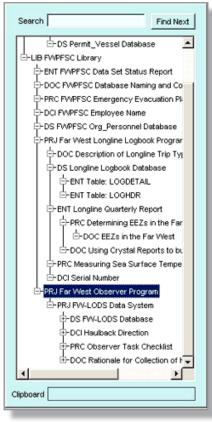


The application Editor panes will show the information for the currently selected object in the Navigator pane. Note that the many tab screens are made available dynamically according to the rules for the specific type of item that is selected in the Navigator pane.



Navigator Pane

Example of an InPort Application Navigator Pane - Catalog Editor



Navigation trees allow users to drill up and down to locate information. The detailed information for the currently selected item is displayed in the Editor Pane. The *Search* text box and the *Find Next* button allows the user to search for the next occurrence of an item that matches the search string text.

Selecting a Tree-Node

Click on the item name in the Navigator pane to select that item. If the item name is not highlighted - then it has not been selected. The information for the highlighted item is displayed in the Editor pane.

Expanding/Collapsing a Tree-Node

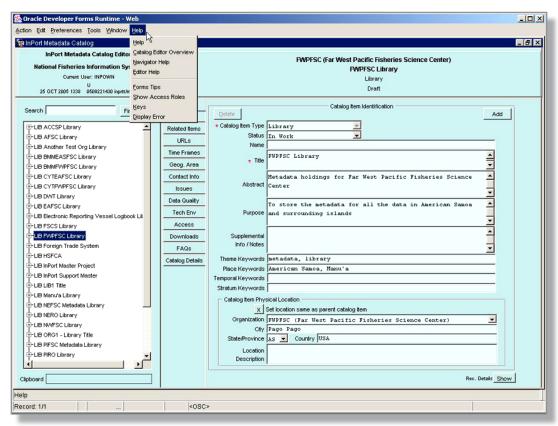
Tree nodes can be expanded to view their child items by either double clicking on the item in the Navigator pane or by clicking on the + before the item's name.

Searching the Tree

Enter a text string in the Search box and click on the Find button in the Navigator pane to find the next item in the tree that matches that search string. The user may continue to click on the Find button to search further down the tree. If no other matches are found, then the search will start back at the top of the tree.



Application Help



InPort applications provide multiple modes for accessing helpful information about the applications, including screen help, field item help and configurable tool-tips.

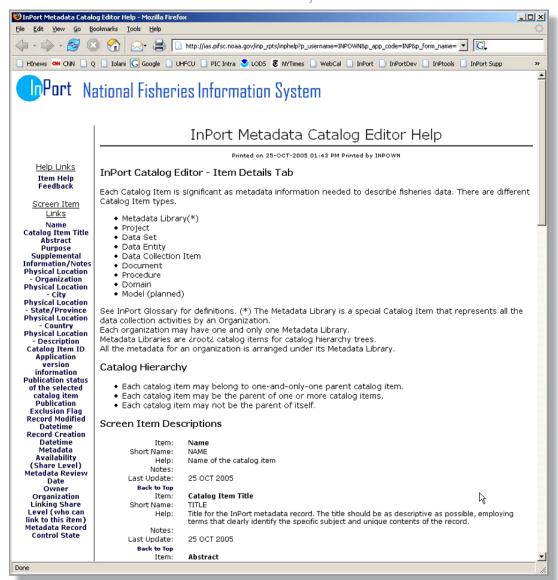
Tab Screen Help

Application screen help is accessible via the fly-out menus. Right-click anywhere in the canvas area - outside a field item - and select either **Navigator Help** or **Editor Help**. The **Editor Help** option is context sensitive and returns help information for the currently selected tab in the *Editor* pane.

<insert Navigator Help>



Tab Screen Help



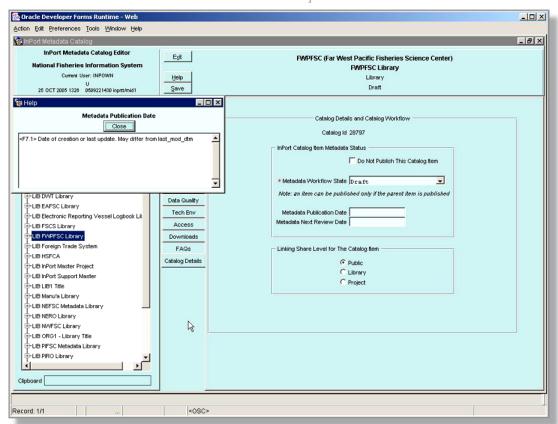
Selecting the Editor Help menu option will display information about the currently selected tab screen along with details about all the items on that screen.

Field Item Help

Help information for a specific item in the *Editor* pane is available by clicking inside a field item and then clicking on the *Help* button in the *Header* bar, typing CTRL-H, or from the top menu bar Help > Field Item Help. Remember to dismiss the *Help* text box in order to continue by clicking the *Close* button or pressing the Spacebar.



Field Item Help



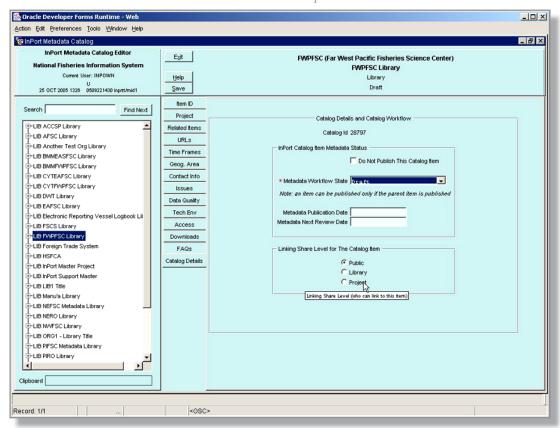
Selecting a field item and then clicking on the Help button or selecting the Item Help option from the Help menu will display information about the selected field

Tool Tips

InPort applications start in a mode that enables Tool Tips for fields and buttons. These pop-up labels can show the user a short description of the field under the cursor. The user may use the Preferences menu above the application header to disable or reduce the number of items that show tool tips.



Field Item Tool tips



Tool tips can be partially or fully disabled through the Preferences menu.

Application Tips

Menus

Right-click on either the *Navigator* pane or the *Editor* pane to access functions specific to those panes.

List Items

There are two types of list-items fields in InPort applications. A **combo-list** allows the user to either enter their own value or, alternatively, select from a list of values already used for that field. The user will see a I text bar cursor in this type of field.

The second type of list item, a **pop-list**, allows the user to select only from a predetermined list. Clicking in this type of field will show an arrow cursor. Note that pop-lists will attempt to do auto-completion if the user types in the first few letters of a value that is in the list. If users find that a pop-list requires another option, they should email the InPort development team at inport.devteam@ mail.nmfs.hawaii.edu

Record Details Button

The *Record Details* button (lower-right on most tab screens) will provide the user with the details of who and when the record was created and last modified. It



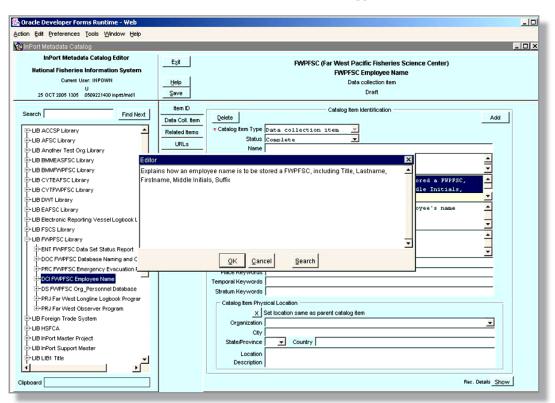
also shows the *Catalog Item ID* number which is useful when linking to other Catalog Items.

Cutting and Pasting

Users may use standard Windows cut-and-paste techniques for text items (Ctrl-C, Ctrl-V). The user may cut text from any Windows document and paste it into a text field.

Expanding Edit Fields

Text fields are often limited in space. To open a field editor, press Ctrl-E. Click on the *Close* button to exit the editor and return to the application.



Many text fields in InPort can contain far more text then there is room for on the screen. Users can open up the text editor by typing Ctrl-E after clicking into the field they want to edit.

Closing Pop-up Windows

When messages or warnings are displayed with a pop-up window, the user may click on the *Close* button, press the Space Bar, or press the Enter key to dismiss the pop-up window and return to the main application.





3. Catalog Administration

Overview

People and organizations are registered in InPort both for managing InPort Libraries, such as Librarian or owner organization, and for being referenced in support roles for individual catalog items, such as Point-of-Contact or Originator.

People and organizations can be registered in InPort by either the InPort Administrator or, within an individual InPort Library, that Library's Metadata Librarian. Only an InPort Administrator can create InPort Libraries and assign Librarians and Data Stewards to a Library.

The Library Manager tool is the main application for catalog administration. Additional functions for creating and managing InPort user accounts are accessible through the Library Manager.

InPort Library Setup

How to Create a New InPort Library

- 1. Each organization will identify a Data Steward and Librarian (and backups, if desired).
- 2. Complete the Library Request Form (see appendix A).
- 3. Fax or email signed Library Request Form to the InPort Administrator
- 4. InPort Administrator will set up the new Library and call the Librarian with InPort account information.
- 5. The new Library will need one or more people for each of the InPort User Roles of Author and Publisher. The Librarian for the new Library may also wish to have other users with Reader role for reviewing - rather than editing - privileges.

InPort User Setup

Except for Data Stewards and Librarians, InPort users are registered and created by the local InPort Librarian(s).

How to Set Up InPort Users

- If the user does not already exist as an InPort Person, the Metadata Librarian creates a new catalog Person in the Library Manager tool.
- 2. The InPort Librarian creates a Catalog Access Request for the

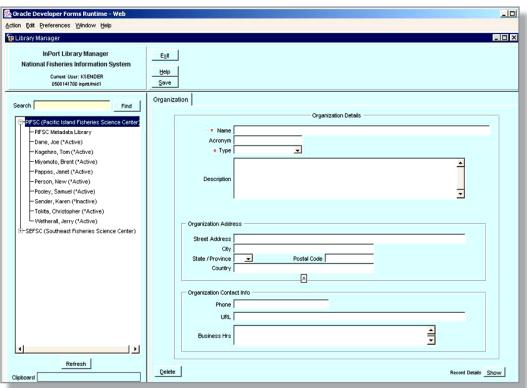


- new person using the Catalog Access Form launched through the Library Manager.
- 3. The InPort Librarian obtains authorization or rejection from the Organization Data Steward.
- 4. InPort Librarian completes the InPort User Role Request.
- The InPort Librarian creates or modifies InPort user account and database role per the authorized InPort User Role Request.

Library Management

Library Manager Tool Functions

The LIBRARY MANAGER allows InPort Administrators and InPort Librarians to create and manage Organizations, metadata Libraries, and Persons. InPort Librarian will see the names of all the organizations for which they serve that Librarian role, in the left hand *Navigator* pane. Only InPort Administrators can create top (root) level Organizations and Libraries. The InPort Administrator is responsible for creating the Librarian(s) and Data Steward(s) for any organization that requires an InPort Library. Librarians may create and manage sub-Organizations and Persons under their Organizations.



InPort Library Manager Tool

The Library Manager is used to register organizations, libraries, and people into the InPort system. InPort Library Manager menus are context sensitive and should provide only the functions that are appropriate for the selected tree-node type.

The LIBRARY MANAGER also allows InPort administrators and librarians to create and process InPort User Roles for InPort persons who will create, manage, or publish metadata in their assigned metadata library. Librarians can also create



and manage a person's InPort account from the LIBRARY MANAGER.

LIBRARY MANAGER menus can be accessed by right-clicking inside the *Navigator* pane The menu options are context sensitive and depend both on the user's In-Port User Role (Librarian or InPort Administrator) and on the currently selected item in the *Navigator* pane. The *Add Person* option will only be available when an organization is selected. The *Add Library* option will only be available when the user is an InPort Administrator and the selected item is an organization.

The Cut, Copy, Paste options will only be available when a Person is selected. Cut with Paste is used to move a person from one organization to another and Copy with Paste is used to assign the person to another organization without moving them from their home organization.

Selecting an organization, library, or person in the *Navigator* pane will cause any information about the organization to appear in the Organization tab of the *Editor* pane on the right of the screen. Selecting an organization item in the *Navigator* pane will display a single *Organization* tab in the *Editor* pane.

Organization Tab

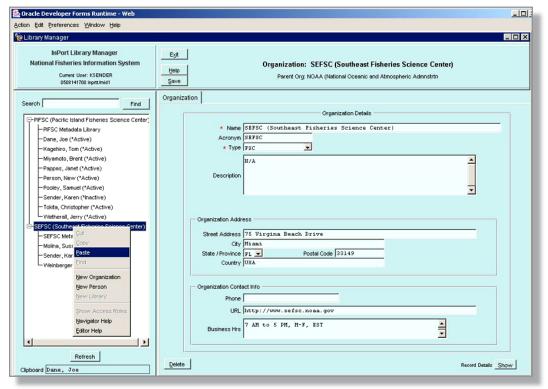
In the *Navigator* pane, double-click on an Organization name to select and/or expand its tree hierarchy. An Organization may contain one and only one Library, may contain other Organizations (sub-organizations), and may contain an unlimited number of persons. A given person may appear under multiple organizations but will only have one *Home Organization* where their information may be edited. The asterisk by the person's status shows that the person record is listed under their Home Organization.

How to Register an Organization

- 1. From the InPort Catalog Tools menu, click on the button beside *Library Manager*.
- 2. Select and highlight the appropriate parent Organization name in the *Navigator* pane.
- 3. Right-click and select menu option New Organization.
- 4. In the Editor pane, fill out the Organization's information for identification, contact, location as is available. Note that only an InPort Administrator may create a new Root (top-level) Organization. Starred items are required fields.
- 5. Click the Save button.



Library Manager - Organization Tab



Organization (and sub-organizations) can be documented in the Library Manager's Organization Tab.

Screen Item Descriptions

- Name The name of the organization
- Acronym An acronym of the organization
- Type The selected organization type. (FK to INP_ORG_TYPES)
- Root Level Organization? Is this a root org, Y/N? Root organizations have no parent.
- **Description** A description of the organization
- Street Address The street address of the organization, including Suite# or P.O. Box
- City The city where the organization is based
- State Province The state or province where the organization is based
- Postal Code The zip or postal code of the organization
- Country The country where the organization is based
- Contact Phone Phone number
- URL A Universal Resource Locator that can be used to reach the organization via the Internet
- Business Hours Business hours

People, referred to as Persons in InPort, are organized under InPort organizations. Organizations can have child Organizations to any level. Person records may be created under any Organization level, however, it is probably most practical to create them at the library level. A Person can be moved from their original organization to another organization. However, unless the current user has the Librarian type InPort User Role to both organizations, the move of the person would need to be done by the InPort Administrator (who has access to all



libraries).

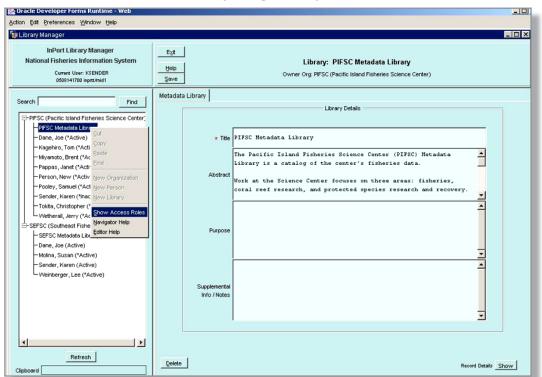
Library Tab

InPort Libraries are created under Organizations. An Organization may contain only one library and only the InPort Administrator may create or edit Libraries.

Selecting a Library item in the *Navigator* pane will display a single *Library* tab in the *Editor* pane. Only a minimum amount of information about a Library is documented in the **LIBRARY MANAGER**, however, more complete information may be detailed through the **INPORT CATALOG EDITOR** at any time. Note that only an InPort Administrator may create Libraries.

How to Register a Library

- From the InPort Catalog Tools menu, click on the button beside Library Manager.
- Select and highlight the appropriate Organization name in the Navigator pane.
- Right-click and select menu option New Library.
- In the Editor pane, fill out basic information about the Library. Starred items are required fields.
- · Click the Save button.



Library Manager - Library Tab

Libraries are created and edited in the Library Manager by the InPort Administrator, but is viewable by the Librarian. A Library may be further documented with the InPort Catalog Editor.



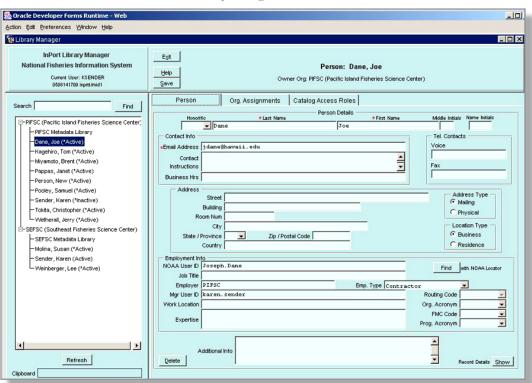
Screen Item Descriptions

- Title Library Title
- Abstract Abstract of the Library
- Purpose Purpose
- Supplemental Information and Notes Supplemental Information and Notes

Person Tab

InPort Persons are used in InPort in two ways. First, anyone requiring an InPort user account must first be registered in the LIBRARY MANAGER. Second, anyone that will be designated as having a Catalog Item Role (as documented in the CATALOG EDITOR, *Contact Roles* tab) must also be registered in InPort.

Selecting a Person item in the *Navigator* pane will display three tabs in the *Editor* pane: Person, Assignments, InPort User Roles. The top *Person* tab will allow detailed documentation of the person's contact information, employment status, expertise, and work location.



Library Manager - Person Tab

When a Person is selected in the Navigator pane (or newly created), three tabs will be displayed - Person tab, Org. Assignment tab, and InPort User tab. Details about the persons are documented on the Person tab.

How to Register a Person

- 1. From the InPort Catalog Tools menu, click on the button beside *Library Manager*.
- 2. Select and highlight the appropriate Organization name in the *Navigator* pane.
- 3. Right-click and select menu option New Person.
- 4. In the Editor pane, fill out the Person's information for identifi-



cation, contact, employment, work location and expertise as is available. Note that the unique identifier for InPort Persons is their email address. Starred items are required fields.

5. Click the Save button.

How to Move a Person to Another Organization

- 1. From the InPort Catalog Tools menu, click on the button beside Library Manager.
- 2. Select and highlight the Person's name and home record in the Navigator pane. A person's home record can be recognized by the asterisk before their status, e.g. Dana Steward (*Active). Only a person's home record is edit able.
- 3. Right-click in the Navigator pane and select menu option Cut. The Person's name will appear the Clipboard area below the Navigator pane.
- 4. Select and highlight the Organization in the Navigator pane to which the Person will be moved. Make sure the information for the organization appears in the Editor pane (otherwise the organization was not successfully selected).
- 5. Right-click in the Navigator pane and select menu option Paste. The Person's name should appear under the selected organization. The Person should no longer appear under their previous home organization.
- Click the Save button.

Screen Item Descriptions

- Honorific Title of respect (Mr., Ms., Mrs., Rev., Dr., The Honorable, etc.)
- Last Name Last name of the person
- First Name First name of the person
- Middle Initials Middle initials of the person
- **Initials** Initials of the person
- Email Address Contact email address
- **Contact Instructions** Contact instructions
- **Business Hours** Business hours
- Voice Phone Number Contact voice phone
- FAX Number Contact fax phone
- Street Address The street number and name, including apartment
- Building Name/ID The building in which the person works
- Room Number The room number in which the person works
- City The city in which the person lives or works
- State Province The state in which the person lives or works
- Postal Code The zip code for the person's residence or business
- Country The country in which the person lives or works
- Address Type "MAILING ADDRESS" or "PHYSICAL AD-DRESS"
- Address Type Is this a residence or business address. Valid entries are: Residence, Business
- NOAA User ID Firstname. Middlename. Lastname
- Job Title The person's job title
- Employer The source of a person's salary. Valid entries include (but ar not limited to): FED, JIMAR



- Employee Type Federal, Commissioned, Contractor, Function, Associate
- Manager's User ID Manager's user ID of the form Firstname.
 Middlename.Lastname.
- Work Location The primary business location for this person
- Expertise Field or fields in which the person has specialized training or experience
- Routing Code Employee routing code
- Organization Acronym The acronym of the organization or agency that this person represents
- FMC Code 2-5 letter code representing FMC
- Program Acronym The acronym of the program/project on which the person works
- Additional Information Supplemental information about this person

Organization Assignment Tab

Clicking on the *Assignments* tab for a Person will allow the user to manage the Person's organization assignments.

An Organization Assignment controls the Libraries in which the Person may be granted InPort User roles.

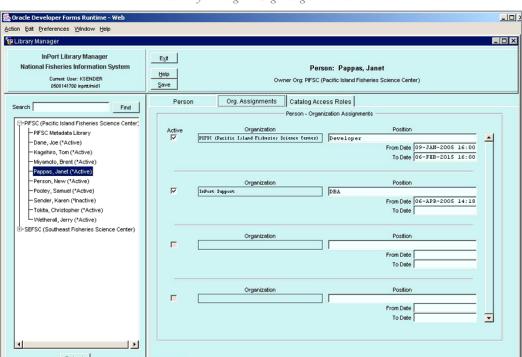
An assignment record is automatically created when a person record is created under an organization. If the person is working in multiple Organizations, the person can be assigned to the other Organization(s), thus creating those assignment records. Assignment records can be edited, activated, and deactivated. Assignment records can only be deleted if they are not referenced anywhere else in the Library and must be deleted before the Person can be deleted from the InPort Catalog. Persons cannot be deleted if there are any references to that Person elsewhere in the InPort Catalog.

How to Assign a Person to Additional Organizations

- From the InPort Catalog Tools menu, click on the button beside Library Manager.
- Select and highlight the Person's name and home record in the Navigator pane. A person's home record can be recognized by the asterisk before their status, e.g. Dana Steward (*Active). Only a person's home record is editable.
- Right-click in the Navigator pane and select menu option Copy. The Person's name will appear the Clipboard area below the Navigator pane.
- Select and highlight the Organization in the Navigator pane to which the Person will have a new assignment. Make sure the information for the organization appears in the Editor pane (otherwise the organization was not successfully selected).
- Right-click in the Navigator pane and select menu option Paste. The
 Org. Assignments tab should now be displayed in the Editor pane
 and the Person's name should appear under the selected organization.
- In the Editor pane, fill out the Person's position title and appropriate begin and end dates for the assignment if required.
- Click the Save button.

Record Details Show





Library Manager - Org. Assignment Tab

The Library Manager's Org. Assignment tab shows in which organizations the Person works.

Screen Item Descriptions

- Active? Record status -- A(ctive), I(nactive), V(oid)
- Organization A system-generated number that uniquely identifies this organization
- **Position** The position held by the person (e.g., debriefer, analyst)
- From Date First day of assignment to the org
- To Date Last day of assignment to the org

Delete

InPort User Roles Tab

Clicking the *InPort User Roles* tab for a Person will display any processed or pending InPort User Role requests.

The *New Role* button on this tab will open up the InPort User Role Manager tool in order to request a new InPort User Role.

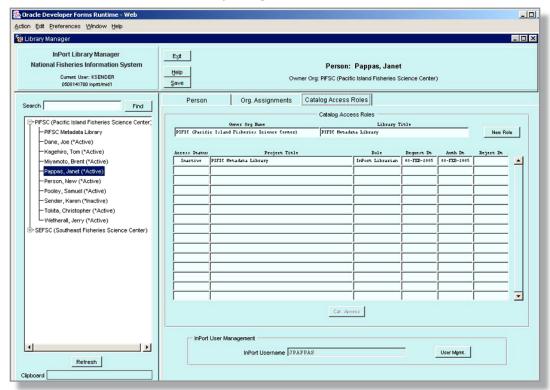
Selecting an existing InPort User Role record in the table will enable the *Cat*.

Access button, which can then be used navigate to that specific InPort User Role record in the InPort USER ROLE MANAGER.

The *User Mgmt*. button allows the user to create and manage the Person's InPort user account, including changing their password.



Library Manager -InPort User Tab



Use the Library Manager's InPort User Roles tab to view the Person's InPort User roles. The Librarian may also use the buttons to open the InPort User Role Manager and User Manager tools for managing roles and InPort user accounts.

Screen Item Descriptions

- Owner Organization Name Owner Organization Name
- Library Title Library Title
- InPort User Role Status InPort User Role Status
- Library/Project Title Library/Project Title
- InPort User Role InPort User Role
- InPort User Role Request Date The date that this role was requested.
- InPort User Role Authorization Date Date that this role was authorized.
- InPort Username InPort account username.

InPort User Account Management

The INPORT USER MANAGER is used to create and manager InPort user accounts. This tool can be opened either from the Library Manager or the InPort USER ROLE MANAGER. It is important to note that only those people - registered in InPort as Persons - that will actually be managing metadata in InPort will require InPort user accounts.

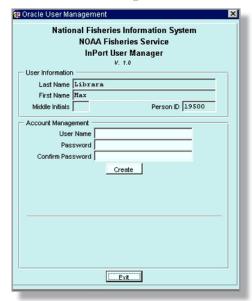
How to Create a New InPort User Account

1. From either the Library Manager or InPort User Role Manager, click on the User Mgmt. button.



- 2. Enter the user's password in both the Password field and the Password Confirmation fields.
- 3. Click the Create button.
- 4. If the requested username already exists, then follow the prompts to see if the existing user is also an InPort user or possibly the same user your are trying to create. If necessary, choose another username and try again.
- 5. Click the Exit button to return to the original tool.

InPort User Manager - New User



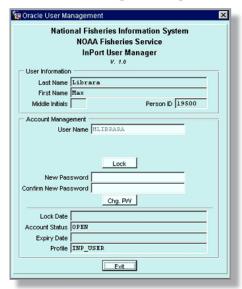
The InPort User Manager tool is used to create and manage InPort user accounts.

How to Change an InPort User's Password

- 1. From either the Library Manager or InPort User Role Manager, select the desired Person record, click on the InPort User Roles tab, and then click on the User Mgmt. button.
- 2. Enter the user's new password in both the New Password field and the New Password Confirmation fields.
- 3. Click the Change Password button.
- 4. Click the Exit button to return to the original tool.







The InPort User Manager can also be used to change passwords or lock/unlock the user's account.

How to Lock or Unlock an InPort User Account

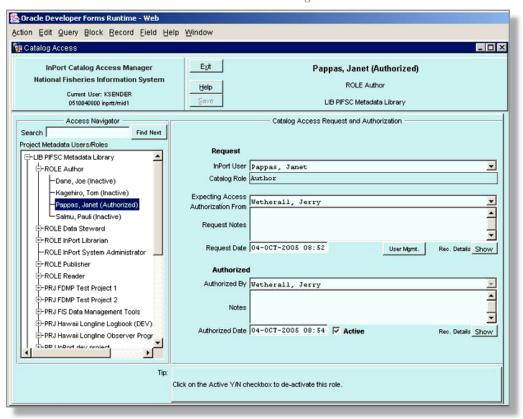
- 1. From either the Library Manager or InPort User Role Manager, select the desired Person record, click on the InPort User Roles tab, and then click on the User Mgmt. button.
- If the user's account is open then the Lock Button will be displayed. If the user's account is locked, then the Unlock button will be displayed.
- 3. Click the appropriate button.
- 4. Click the Exit button to return to the original tool.

InPort User Role Manager

The INPORT USER ROLE MANAGER allows InPort Administrators and Librarians to grant specific Catalog Access Roles to InPort Persons for specific metadata Libraries and Projects. If the Librarian wishes to grant access to specific Catalog Projects rather than the entire Library, then the Librarian must first create the Project(s) in the INPORT CATALOG EDITOR.



InPort User Role Manager



This screen shows an authorized, active InPort User role. The screen displays in this application are context sensitive and depends both upon the type of item selected in the Navigator pane and the status of that item.

The granting of a InPort User Role is a two step process. A Request is generated for a specific Person, for a specific Role, in a specific Library or Project. At that time, the Librarian or InPort Administrator will specify which Data Steward or InPort Administrator is expected to Authorize (or possibly Reject), the catalog access Request. After the Request is saved, it will be marked as Pending. Only a Pending request may be deleted. Librarians are expected to maintain their normal in-house process or documentation for user computer and data access and while it is the Librarian who executes the final authorization or rejection of an access Request, the Librarian will specify the Data Steward that actually signed off on the Request.

Note that helpful information will be displayed at the bottom of the screen in the *Tip* area below the *Editor* pane. The currently displayed *Tip Text* will depend on what action the user has just performed and should provide the user with what their next action should be.

The InPort User Role Manager can only be opened from the Library Manager tool from either the *New Role* button or the *Cat. Access* button.

From the Library Manager, with a Person's *InPort User Roles* tab displayed, clicking on the *New Role* button will open the InPort User Role Manager. The *Navigator* pane will be positioned at the Library of the Organization that was last selected in the Library Manager from which the user just came. If that Organization does not yet have a Library, the *Navigator Tree* will be positioned at the first available Library.

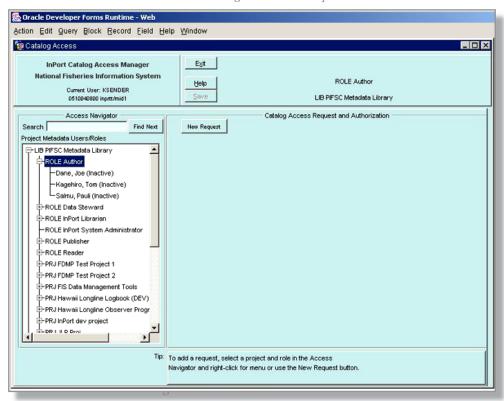


Note that clicking the *Exit* button will close the INPORT USER ROLE MANAGER and re-open the LIBRARY MANAGER. Any new role information for the selected person will be reflected on the displayed *InPort User Role* tab.

With the selected Library expanded in the *Navigator* pane, all the possible InPort user roles will be visible. A Plus sign (+), to the left of the Role name will indicate that at least one Person has a pending or completed role of that type.

Creating InPort User Role Requests

User Role Manager - New Role Request



Locate the Library or Project and select the role which the user needs. Right click to select the New Request option or click the New Request button in the Editor Pane. Follow the instructions in the Tip Area at the bottom of the Editor Pane.

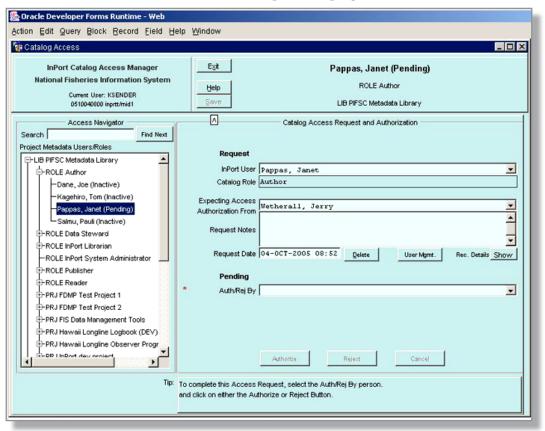
How to Create an InPort User Role Request

- To create a new InPort User Role request, in the InPort User Role Manager, select the appropriate role under the Library or Project that needs that role. The user may either click the New Request button or right-click to select the New Request menu option.
- Clicking on the New Request button disables (grays out), the Navigator pane and displays the New Request fields in the Editor pane
- 3. The Catalog Role field and request date will already be filled out. Per the Tip Text, select an InPort User and the Expected Authorizer from their pop-lists. You may choose to write notes in the Request Notes field.
- 4. Click the *Save* button to complete the request and re-enable the *Navigator* pane.



Authorizing or Rejecting an InPort User Role Request

InPort User Role Manager - Pending Request



A completed request appears as a Pending request in the Navigator Pane. This request may still be deleted at this point, if needed.

How to Complete a Pending User Role Request

- Frequently, there will be a lag time between requesting and authorizing (or rejecting) an access role. For that reason, there the Librarian and InPort Administrator may navigate directly to a person's Pending access request in the Catalog Access Manager by selecting the access request record in the Library Manager, InPort User Role tab for the Person in question, and then clicking on the Cat. Access button.
- 2. When the InPort User Role Manager opens, the *Navigator* pane will have the Persons access request record selected.
- 3. Select the appropriate Data Steward or InPort Administrator from the *Auth/Rej By* field. This will lock the *Navigator* pane.
- 4. Click on the *Authorize* or *Reject* button to complete the role request, or click on *Cancel* to abort the process and leave it as a Pending request.
- 5. Click the *Save* button after completing the request to complete the process and re-enable the *Navigator* pane.

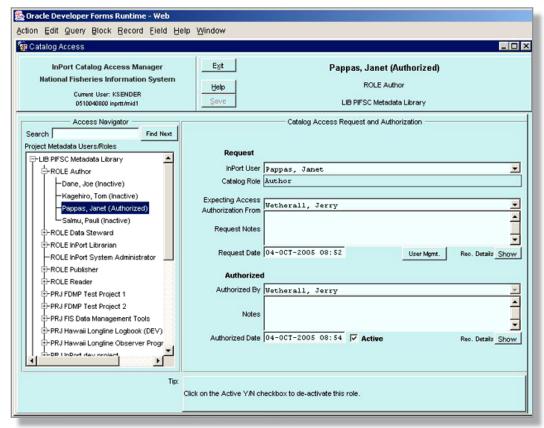
Note that InPort User Role authorization will require that the Person being granted the role must first have an active InPort user account. The Librarian may use the *User Mgmt*. button to create, unlock/lock the account or change the user's password. This function is also accessible directly from the LIBRARY MANAGER,



InPort User Roles tab.

De-activating or Re-activating an Authorized Role

InPort User Role Manager - Inactive Role



An authorized user role may be subsequently deactivated or reactivated by toggling the Active check box.

How to Deactivate or Reactivate an InPort User Role

- Using the InPort User Roles Manager, completed access requests may not be deleted, but they may be deactivated, or reactivated by toggling the Active check box.
- 2. Click the Save button to complete that action.

User Roles Report

A list of the InPort Persons that are granted user roles for a given Library, Project, or Catalog Item is available from both the Library Manager and Catalog Editor . This report will display in the user's browser and can then be printed.

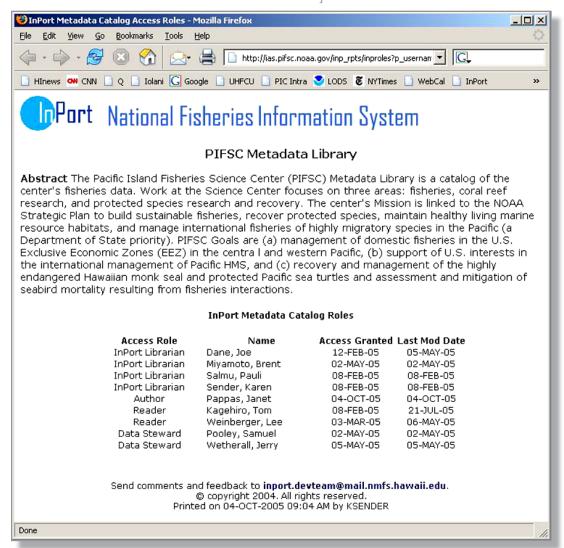
How to Generate a User Roles Report

- 1. From either the LIBRARY MANAGER or CATALOG EDITOR, select a Library or Catalog Item in the *Navigator* pane.
- 2. Right-click in the *Navigator* pane and select menu option Show User Roles.
- 3. The report will display in the user's default browser. If desired,



use the browser's print function to print the report.

InPort User Roles Report



This InPort User Roles Report can be generated from either the Library Manager or Catalog Editor.





4. Catalog Maintenance

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Catalog Editor

The InPort Catalog Editor tool is used for:

- Creating Catalog Items in a Library Hierarchy
- Reviewing, revising, and approving information in the catalog
- Moving Catalog Items within a Library Hierarchy
- Publishing Catalog Items to internal users or the public

<insert general description of the how the Catalog Editor is functionally organized>

How to Create New Catalog Items

- 1. From the InPort Catalog Tools menu, click on the button beside *Catalog Editor*.
- Select and highlight the appropriate Catalog Item or Library in the Navigator pane, under which you want to create the new item
- Right-click and select menu option New Item or click the Add button in the Editor pane.
- 4. In the Catalog Item Type pop-list, select a Catalog Item Type
- 5. Complete the desired fields on the Item ID tab and the additional tab that is named for the chosen item type.
- The user may choose to further describe the item using any of the Detail Modules available for the chosen item type.

How to Move a Catalog Item to a Different Parent Item

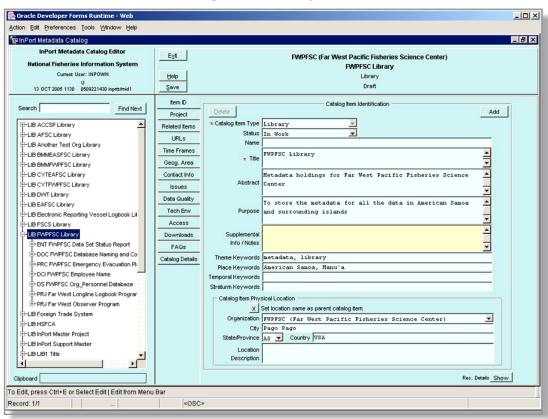
- 1. In the Catalog Navigator pane, select the item to be moved. Important: the item is selected ONLY if you see its details in the Editor pane on the right.
- Right click on the selected item and choose menu option Cut. The name of the selected item will appear below the Navigator pane in the box labeled Clipboard.
- 3. Select the new Parent Item under which you want to place the item you cut to the Clipboard. Again, ensure that you can see this parent item in the Editor pane.
- Right click on the new Parent Item and choose menu option Paste.
- 5. If the move to the new Parent Item will produce a valid parentchild relationship, the user will be asked to confirm or Cancel



- the operation.
- 6. When the user confirms the operation, the Catalog Item that was placed in the Clipboard will move to the new location.
- < How to delete catalog items: need to address various rules on item deletion>

Catalog Item Identification

Catalog Editor - Item Identification Tab



InPort Catalog Editor showing the Item Identification tab. This tab is common to every catalog item type and is used to describe the basic information about the identification, purpose and location of the catalog item.

Screen Item Descriptions

- Item Type Type of catalog item. Options currently include: Data Collection Item, Data Set, Data Entity, Document, Procedure, and Project
- Item Status Data status of this catalog item. Options include: Complete, In Work, Planned
- Item Name Name of the catalog item
- Item Title Title for the InPort metadata record. The title should be as descriptive as possible, employing terms that clearly identify the specific subject and unique contents of the record.
- Abstract The abstract should clearly reference the specific subject and unique dimensions of the resource being documented, along with explicit consideration of major scientific concepts keywords, and other descriptive terms to aid system users in searching through the metadata records and identifying relevant ones. FGDC Reference



- Purpose Purpose or a summary of intentions with which the item was developed
- Suppl Info/Notes General notes about this catalog item
- Theme keywords Purpose or a summary of intentions with which the item was developed
- Place keywords Purpose or a summary of intentions with which the item was developed
- Temporal keywords Purpose or a summary of intentions with which the item was developed
- Stratum keywords Purpose or a summary of intentions with which the item was developed
- Physical Loc Organization FK to Orgs indicating the physical location of the catalog item.
- Physical Loc City Physical location of the catalog item -- city.
- Physical Loc State/Province Physical location of the catalog item -- state or province .
- Physical Loc Country Physical location of the catalog item -country .
- Physical Loc Description Physical location of the catalog item
 -- narrative description.
- Catalog Item ID Catalog Item primary key.
- Publication status Publication status -- (U)npublished, (I)nternally Published, (E)xternally Published, (W)ithdrawn
- Record Creation Datetime System date of creation
- Owner Org Organization that is the steward, owner, or caretaker of this data item.

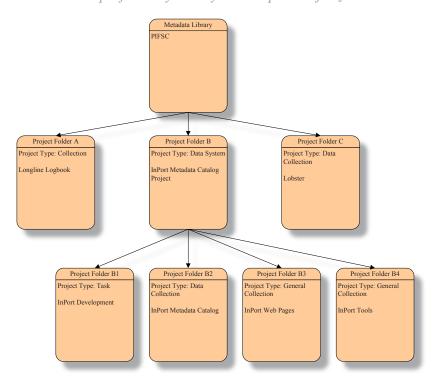
Catalog Item Types

Project

Project type catalog items can be thought of as metadata folders. A Project folder might, indeed, describe a real-life data project, it might also be used as a convenient way to describe a set of related items under which each of the collected items may be cataloged.

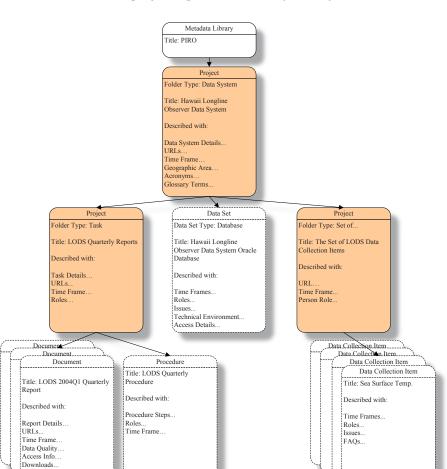


Example of a Library hierarchy with multiple levels of Projects



The above example shows multiple levels of catalog Projects in a Library hierarchy. Each Project folder might contain many other catalog item types besides those shown in the example.





Example of catalog Projects in a Library hierarchy

InPort Projects can be thought of as metadata folders that can be used to describe an organization's project, program, task, or activity. A Project may be the parent item of other projects.

A catalog item of type Project can be thought of as a metadata folder or portfolio that contains one or more Catalog Items of any type - including other Project items. Each Project can contain the metadata for an organization's:

- Program
- Project
- Task
- Activity
- Data Collection Effort
- Data System
- Set of... (related catalog items, such as documents, collection forms, data collection items, etc.)

Each Project can be fully described, just like any other catalog item type, and can include details of the following detail modules:

- Related Items
- URLs
- Time Frames

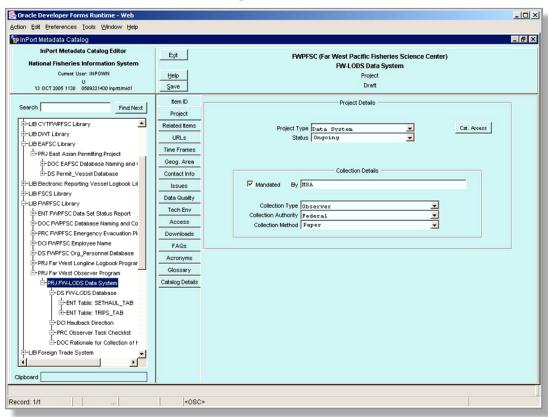


- Geographic Area
- Contact Information (Person/Org Roles)
- Issues
- Data Quality
- Technical Environment
- Access Info
- Downloads
- FAQs
- Acronyms
- Glossary Terms

Each Data Set can itself contain child catalog items of type:

- Project
- Data Set
- Data Entity, e.g., tables, spreadsheets, maps, etc.
- Data Collection Item
- Documents
- Procedure

Catalog Editor - Project Tab



After completing the Item ID tab for a new catalog Project, the user should complete the Project tab to specify the type of project. Complete the Collection Details section only if the Project describes a data collection effort.

Screen Item Descriptions

- Project Type Type of project. Options include: Project, Program,
 Data Collection, Data System, Task, Activity, Set of (User defined)
- Project Status Status of the Project (Active, Completed, In Development, Suspended)
- Mandated? Is this project required by law or other regulation?



- Mandated By What law or regulation mandates this project
- Collection Type Type or category of the collection project: Landings, Logbook, Observer, Permit, Socio-economic, VMS, other (JP)
- Collection Authority Administrative unit of government authorizing/funding this Collection (JP)
- Collection Method(s) Method(s) used to collect data: Electronic, Paper, Electronic and Paper, etc.

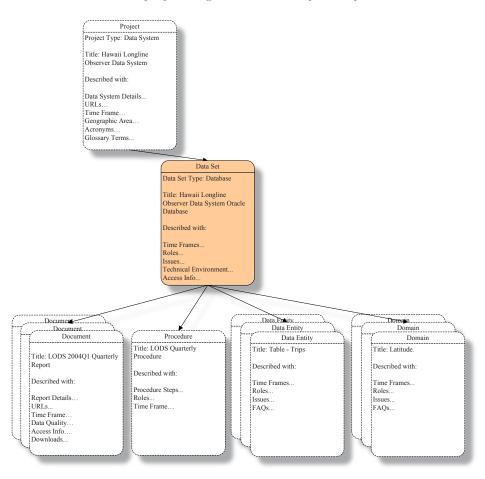
How to Document a Project, Program, Task, or Activity

- 1. From the InPort Catalog Tools menu, click on the button beside *Catalog Editor*.
- 2. Select and highlight the appropriate parent Library name in the *Navigator* pane.
- 3. Right-click and select menu option *New Item* or click the *Add* button in the *Editor* pane.
- 4. In the Catalog Item Type pop-list, select Project.
- 5. In the Editor pane, fill out the Identification in the Item ID Tab. Starred items are required fields.
- 6. Click on the Project Tab and complete fields that can describe the project or activity. Note that Collection Project items are not required for non-data collection projects.
- The user may further document the project using the available Detail Module Tabs. (See Detail Modules section for further information.)
- 8. Click the Save button.



Data Set

Example of a catalog Data Set in a Library hierarchy



Data Sets will most likely have one or more Data Entity child items.

A catalog item of type Data Set can describe...

- a Database
- a collection of related data Files
- Other (as described in Abstract)

Each Data Set can be fully described, just like any other catalog item type, and can include details of the following detail modules:

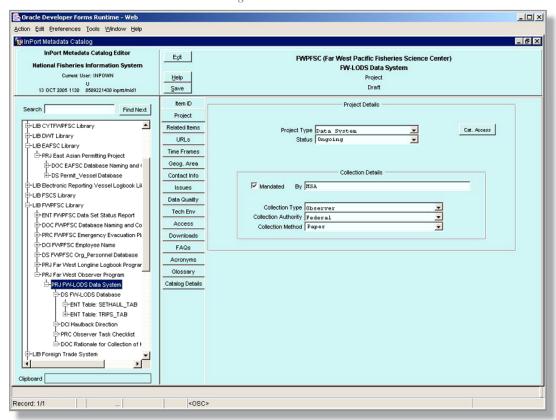
- · Related Items
- URLs
- · Time Frames
- Geographic Area
- Contact Information (Person/Org Roles)
- Issues
- Data Quality
- Technical Environment
- Access Info
- Downloads
- FAQs
- Glossary Terms

Each Data Set can itself contain child catalog items of type:



- Data Set
- Data Entity, e.g., tables, spreadsheets, maps, etc.
- Data Collection Item
- Document
- Procedure

Catalog Editor - Data Set Tab



After completing the Item ID tab for a new catalog Data Set, the user should complete the Data Set tab to specify the type of data set This tab also allows for descriptions of the entities and attributes – tables and columns – contained in the data set.

Screen Item Descriptions

- Data Set Type A general description of the Data Set. Examples: Database, Flat files, mixed, set of reports, etc.
- Data Set Maintenance Frequency Frequency w/ which changes and additions are made
- Data Set Entity Attribute Overview Detailed summary of the information contained in a data set
- Data Set Entity Attribute Detailed Citation Reference to the complete description of the entities, including column names and formats (JP) attributes, and attribute values for the data set.
- Data Set Entity Attribute Detailed Citation URL URL to entity attribute detail citation
- Source Media Type Data Set source media type

How to Catalog a Data Set, Database, or File Collection

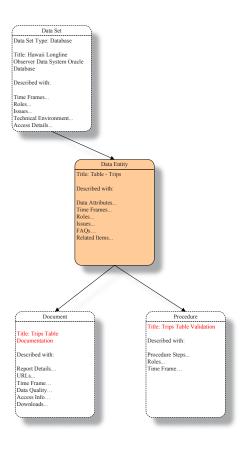
1. From the InPort Catalog Tools menu, click on the button beside *Catalog Editor*.



- 2. Select and highlight the appropriate parent Library name in the *Navigator* pane.
- 3. Select and highlight the Catalog Item under which the new Data Set will be cataloged.
- 4. Right-click and select menu option *New Item* or click the *Add* button in the *Editor* pane.
- 5. In the Catalog Item Type pop-list, select Data Set.
- 6. In the *Editor* pane, fill out the Identification information in the *Item ID* tab. Starred items are required fields.
- 7. Click on the *Data Set* tab and complete the fields that can best describe the data set, database, or file collection that is being cataloged.
- 8. The user may further document the data set using the various Detail Module tabs. (See Detail Modules section for further information.)
- 9. Click the Save button.

Data Entity

Example of catalog Data Entity in a Library hierarchy



Data Entities are most frequently thought of as Tables. Data Entities normally are child items of a catalog Data Set.

A catalog item of type Data Entity can describe...

- · a data table
- · a data file



- a data report
- a spreadsheet
- · a data entry form with data
- · an xml file
- other (user defined)

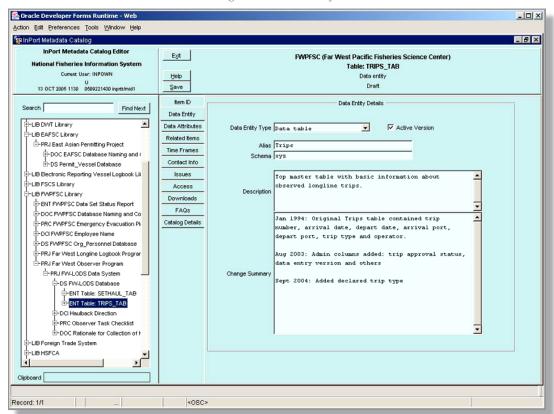
Each Data Entity can be fully described, just like any other catalog item type, and can include details of the following Detail Modules:

- · Related Items
- URLs
- Time Frames
- Geographic Area
- · Contact Information (Person/Org Roles)
- Issues
- Data Quality
- Access Info
- Downloads
- FAQs
- Glossary Terms

Each Data Entity can itself contain child catalog items of type:

- Attributes
- Document
- Procedure

Catalog Editor - Data Entity Tab



After completing the Item ID tab for a new catalog Data Entity, the user should complete the Data Entity tab to describe the type of entity. Data Entity and Attribute information may also be loaded into InPort through the Batch Loader process.

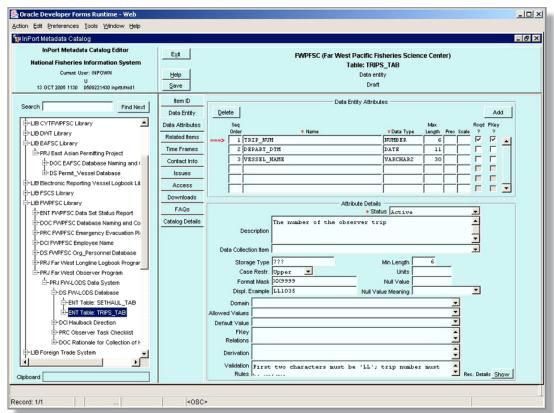


Screen Item Descriptions

- Entity Type Code The word 'Entity' is used to describe a data holding of some type, e.g., Data file, Data table, Report, Spreadsheet, Form (data collection or data entry), XML document, etc)
- Active Version? Is this the active (currently in use) version of the table/entity?
- Alias Code or short name for the table or entity (e.g., org for organization)
- Schema Name If Oracle, SQL Server, or MySQL, the schema name in which the table resides
- **Description** Detailed description of the entity
- Change Summary Summary description of changes to this version of the table from the previous version

Data Attributes

Each data attribute is significant as a piece of data collected and stored in a table, field, cell, or form or a calculated value. Data attribute records always reside under a Data Entity parent item.



Catalog Editor - Data Attributes Tab

After completing the Data Entity tab, the user can use the Data Attributes tab to describe the details of the individual attributes - columns - contained in the data entity. Note that the user may choose to use the Batch Loader process to load table/column information into the InPort Catalog.

Screen Item Descriptions

- Order The numeric order of the column in the table layout
- Attribute Name The name of the attribute



- Data Storage Type The architectural data type.
- Max Length Maximum length of this column for character-type data; max length for Oracle NUMBER data type is always 22; see also definitions for data_precision and data_scale for NUMBER data type; max length is not meaningful for Oracle DATE data type (IP)
- Data Precision For Oracle NUMBER data type, the total number of digits. Oracle guarantees the portability of number with precision ranging from 1 to 38.
- Data Scale For Oracle NUMBER data type, the number of digits to the right of the decimal point. The scale can range from -84 to 127. 'Decimal' length from other database types should be put in this column (JP)
- Required? Is this column always required (cannot be null)?
- Primary Key? Is this column the primary key or part of the primary key?
- Status Status of this attribute (Active, Inactive, In Development, In Review)
- Description Narrative description of the attribute
- Data Collection Item InPort Data Collection Item associated with this attribute (JP)
- General Data Type The general data type of the column (Character, Integer, Real Number, Date)
- Case Restriction Indicate whether the column is to be stored as Upper, Lower or Mixed case
- Format Mask Pattern used as a format aid during data entry
- Display Example An example of how the data will be displayed to
- Minimum Length Minimum length of this column for character-type data; see also definitions for data_precision and data_scale (NUMBER data type); min length not meaningful for Oracle DATE data type
- Unit of Measure If applicable, record the proper unit of measure for this column (e.g., grams, inches, degrees Fahrenheit, etc.)
- Null Value The symbol used in this table, view or report to represent a null value
- Null Value Meaning If a value is used to represent a null, what is the specific meaning of the value
- Domain The InPort Domain used by this attribute. Please use column Validation_Rules to indicate an Oracle Domain used by this attribute.
- Allowed Values List of possible values or range of values for this column
- **Default Value** If desired, the value to be placed in the column when no data is entered
- Foriegn Key Relations List tables with which this column has foreign key relations
- Derivation If this data element is derived, give the algorithm or expression that describes how this data element's value is established
- Validation Rules List validation rules or references to validation rules for this column
- Version Column not currently in use. Column definition: Latest version of this column (this is NOT the data set version number)
- Decimals Column not currently in use



How to Catalog a Data Entity with Data Attributes

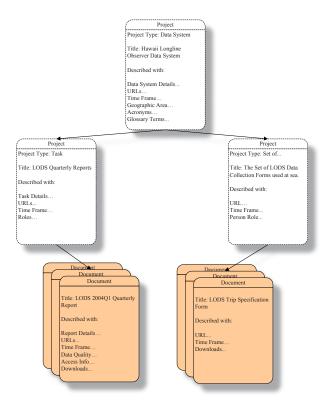
Note that there are two methods for cataloging Data Entities within InPort. This method outlines the process for hand entering information. If, as is most often the case, the Data Entity is a table in a database, the information may be downloaded from the user's local data dictionary and uploaded with the InPort Batch Load tools (see Batch Loading section of this user guide).

- 1. From the InPort Catalog Tools menu, click on the button beside *Catalog Editor*.
- 2. Select and highlight the appropriate parent Library name in the *Navigator* pane.
- 3. Select and highlight the Catalog Item, most likely of type Data Set, under which the *Data Entity* will be cataloged.
- 4. Right-click and select menu option *New Item* or click the *Add* button in the *Editor* pane.
- 5. In the Catalog Item Type pop-list, select Data Entity.
- 6. In the *Editor* pane, fill out the Identification information in the *Item ID* tab. Starred items are required fields.
- 7. Click on the *Data Entity* tab and complete the fields that can best describe the document that is being cataloged.
- 8. Click on the *Attributes* tab to fill out information about the attributes or columns associated with the *Data Entity* item.
- 9. The user may further document the *Data Entity* using the various Detail Module tabs that are available for data entities.
- **10.** Click the *Save* button.



Document

Documents in a Library Hierarchy



Documents cannot have child catalog items. If a document contains data that should be described with a procedure or data attributes, then it would be preferable to catalog the item as a Data Entity.

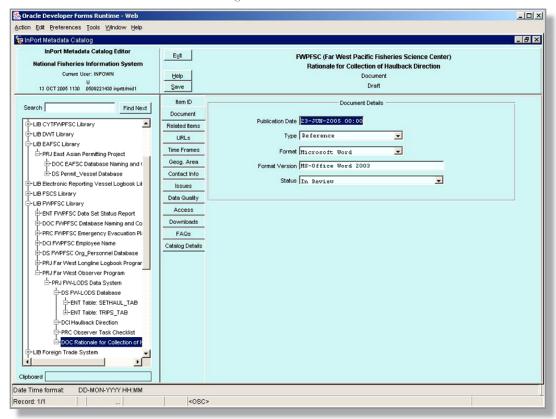
A catalog item of type Document can describe any existing document. Each Document can be fully described, just like any other catalog item type, and can include details of the following Detail Modules:

- Related Items
- **URLs**
- Time Frame
- Geographic Area
- Contact Information (Person/Org Roles)
- Issues
- Data Quality
- Access Details
- Downloads
- **FAQs**

Documents cannot themselves contain other child catalog items. If a document contains data, and thus needs to be described with procedures or attributes, then it should probably be cataloged as a catalog type Data Entity.



Catalog Editor - Document Tab



After completing the Item ID tab, the user can use the Document tab to describe the details of the document being cataloged.

Screen Item Descriptions

- Document Publication Date Date the document was published
- Document Type Document types include (but are not limited to):
 Thesis, Report, Book, Conference Proceedings, Journal article, Meeting minutes, Newsletter, FAQ, Technical Memorandum, Administrative Report, Graphic, Map, Legal Document, Letter, Presentation, Historical account, Reference, Excerpt, Interview, News release, Specifications
- Document Format Type Valid document formats include (but are not limited to): DOC, WPD, TXT, HTM
- Document Format Version The version of the software in which the document is stored
- Document Status The development stage of the document: Draft, Final, In Review, Planned, Published

How to Catalog a Document

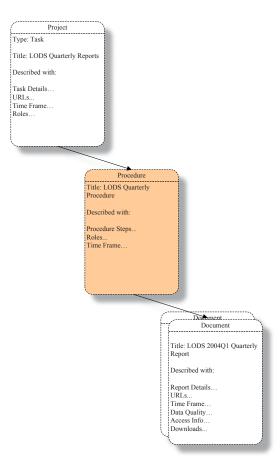
- From the InPort Catalog Tools menu, click on the button beside Catalog Editor.
- 2. Select and highlight the appropriate parent Library name in the *Navigator* pane.
- Select and highlight the Catalog Item under which the document will be cataloged.
- 4. Right-click and select menu option New Item or click the Add



button in the Editor pane.

- 5. In the Catalog Item Type pop-list, select Document.
- 6. In the *Editor* pane, fill out the Identification information in the *Item ID* tab. Starred items are required fields.
- 7. Click on the *Document* tab and complete the fields that can best describe the document that is being cataloged.
- 8. The user may further document the project using the various Detail Module tabs that are available for documents.
- 9. Click the Save button.

Procedure



A catalog item of type Procedure can describe a procedure, protocol, or process that is relevant to a parent catalog item. Each Procedure can be fully described, just like any other catalog item type, and can include details of the following Detail Modules:

- · Related Items
- URLs
- Time Frames
- Contact Information (Person/Org Roles)
- Issues
- Data Quality
- · Technical Environment

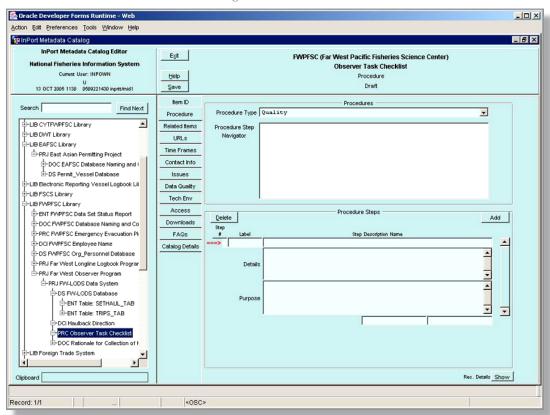


- Access Info
- Downloads
- FAQs
- Glossary Terms

Each Data Set can itself contain child catalog items of type:

- Document
- Procedure

Catalog Editor - Procedure Tab



After completing the Catalog ID tab, the user can use the Procedure tab to list the detailed steps of the procedure being cataloged. Note that the user may also choose to add a child document item to the procedure rather than cataloging the procedure steps.

Screen Item Descriptions

- **Procedure Type** The type of procedure. Valid entries include but are not limited to: Acquisition, Manipulation
- Step Order The numerical order of the step in the procedure
- Step Label Step label
- Step Name Descriptive name of the step in the procedure (more descriptive than label (JP)
- Step Details Detailed narrative explaining the procedure
- Step Purpose Purpose of the procedure
- Start Date Start date of the procedure
- End Date End date of the procedure

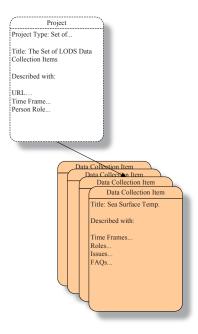
How to Catalog a Procedure

1. From the InPort Catalog Tools menu, click on the button beside *Catalog Editor*.



- Select and highlight the appropriate parent Library name in the Navigator pane.
- 3. Select and highlight the Catalog Item under which the new procedure will be cataloged.
- 4. Right-click and select menu option *New Item* or click the *Add* button in the *Editor* pane.
- 5. In the Catalog Item Type pop-list, select Procedure.
- 6. In the *Editor* pane, fill out the Identification information in the *Item ID* tab. Starred items are required fields.
- 7. Click on the *Procedure* tab and complete the fields that can best describe the procedure that is being cataloged.
- 8. The user may further document the Procedure using the various Detail Module tabs that are available for procedures.
- 9. Click the Save button.

Data Collection Item



The catalog item type Data Collection Item is used to describe the collection of a specific type of information within a data collection project/effort, such as trip number, sea-surface temperature, and hook type. A well documented data collection system will include information on the history, purpose, collection methods, and business rules for each type of information, or data collection item, which is collected.

Each Data Collection Item can be fully described, just like any other catalog item type, and can include details of the following Detail Modules:

- · Related Items
- URLs
- Time Frames
- Contact Information (Person/Org Roles)
- Issues

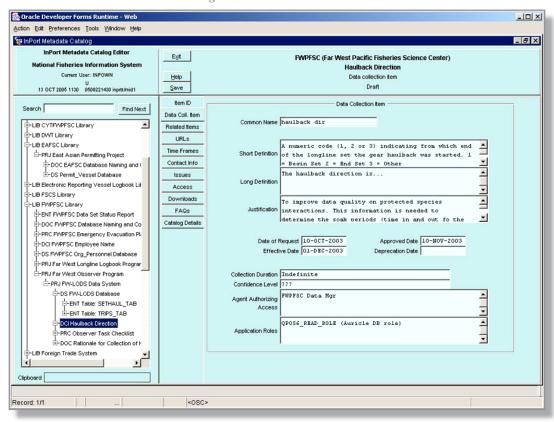


- · Data Quality
- Access Info
- Downloads
- FAQs
- Glossary Terms

Each Data Collection Item can itself contain child catalog items of type:

- Document
- Procedure

Catalog Editor - Data Collection Item Tab



After completing the Item ID tab, the user can use the Data Collection Item tab to describe the details pertinent to the item.

- Short Definition A brief definition of the data collection item
- Long Definition Detailed, comprehensive definition of the data collection item
- Justification Rationale for defining this data collection item. This should include any legal mandates or local, regional or national requirements
- Request Date Date this catalog item was requested to become a data collection item within this project
- Approval Date Date this data collection item was approved for use in this project
- Effective Date Date this data collection item becomes effective within this project
- Retired Date Date after which this data collection item is no longer used by this project



How to Catalog a Data Collection Item

- 1. From the InPort Catalog Tools menu, click on the button beside Catalog Editor.
- 2. Select and highlight the appropriate parent Library name in the Navigator pane.
- 3. Select and highlight the Catalog Item under which the new data collection item will be cataloged.
- 4. Right-click and select menu option New Item or click the Add button in the Editor pane.
- 5. In the Catalog Item Type pop-list, select Data Collection
- 6. In the Editor pane, fill out the Identification information in the *Item ID* tab. Starred items are required fields.
- 7. Click on the *Data Collection* tab and complete the fields that can best describe the item that is being cataloged.
- 8. The user may further document the Data Collection Item using the various Detail Module tabs that are available for this catalog item type.
- 9. Click the *Save* button.



Catalog Detail Modules

Detail Modules may be used to describe individual Catalog Items in greater detail. For example, a database table (Data Entity) may be described by listing its columns (Data Attributes); a Data Collection Item can be further described using a Time Frame to define when is was collected and a Procedure for how it was collected.

The current list of Detail Modules include:

- · Related Items
- URLs
- Time Frames
- Geographic Area
- Contact Information (Person/Org Roles)
- Issues
- Data Quality
- Technical Environment
- Access Info
- Downloads
- FAQs
- Acronyms
- Glossary Terms

InPort has been designed to allow for the development of additional Detail Modules. Modules already in development include:

- Data Distribution Details
- Geospatial Details (for cataloged data products)
- Enhanced Technical Environment Details
- Enhanced Keyword Module with Keyword Thesauri
- Activity Logs

Definitions for each item within a given Detail Module can be accessed by right-clicking on the canvas area of the *Editor* pane for the particular tab of interest, and selecting Editor Help.

Related Items

It is frequently important to create relationships between catalog items that reside in different projects or libraries. For example, a single data quality document can be referenced by several projects, or a Longline Logbook data set might be referenced by a Longline Observer data set. InPort allows users to create these user-defined relationships between their catalog items and any published catalog items that have a **Share Level** that makes them available for external linking. Note that the Share Level is set on the *Catalog Details* tab.

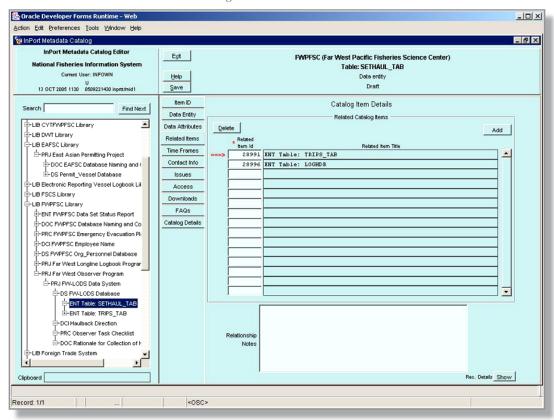
Using Related Items is a powerful way to create virtual metadata folders of related data sets. The user could create a Project catalog item called, for example, Highly Migratory Species Data Sets, and then create Related Item links to all the available data sets that are relevant to that topic.

There are three possible share levels:



| | Share Level | Description | | |
|---|-------------|--|--|--|
| 1 | Project | Any item in the same Project may link to this item (this is the default share level) | | |
| 2 | Library | Any item in the same Library may link to this item, once this item is published (internal or external) | | |
| 3 | Public | Any item in any Library may link to this item, once this item is published (internal or external) | | |

Catalog Editor - Related Items Tab



User-defined relationship between two Catalog Items.

Screen Item Descriptions

- Related Item ID The InPort ID number of the related item
- Related Item Title InPort Title of the related item. Non-enterable field. Field is populated when Related Item ID is entered.
- Relationship Notes Helpful notes describing the relationship of this item to the current item

How to Create Related Items

- 1. Using either the Catalog Editor or the InPort Search, locate the catalog item to which you want to link to obtain the Catalog Item ID. In the Catalog Editor the Item ID is found on the Catalog Details tab and in the web search it is found in the Catalog Details section at the bottom of the Catalog Item Summary page.
- 2. In the Catalog Editor, select the catalog item that you want to link from.
- 3. Select the Related Items tab and enter the Item ID in the next



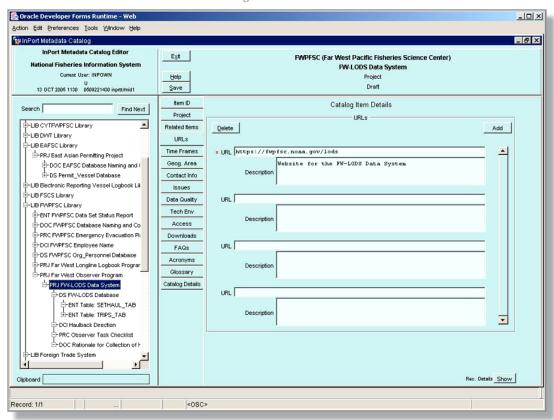
available record.

4. In the Relationship Notes field, describe the details of the new relationship.

URLs

Each URL is significant as a Universal Resource Locator on the WWW that helps describe a catalog item (e.g., a project web site, a report).





Internet addresses which may include the path to a file or resource.

Screen Item Descriptions

- URL -the complete Universal Resource Locator (web address) needed to access the web resource
- URL Description A detailed description of what a user can access via the URL

How to Create URLs

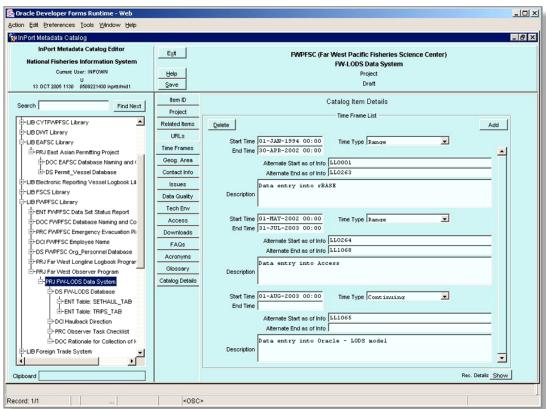
- 1. In the Catalog Editor, select the catalog item that you want to link from.
- 2. Select the *URLs* tab and enter the URL and URL Description for each URL that refers to the selected catalog item.
- 3. Note that a catalog item may have any number of URLs. Use the *Add* button to create additional open records if needed.



Time Frame Module

Time frame in GMT (or UCT, coordinated universal time) of the data collection event. This may be either a date/time range or a single date/time. (FGDC F9).

Catalog Editor - Time Frames Tab



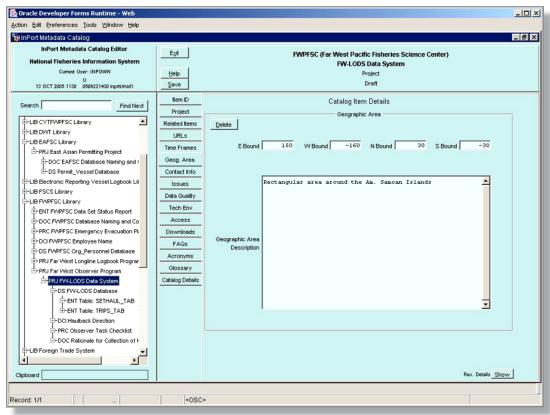
Date/time in GMT of the data collection event. This may be listed as a single date/time, a date/time range, multiple date/times or multiple date/time ranges.

- Start Datetime The date/time (GMT) when the activity described in the data collection event record occurred or was initiated
- Time Frame Type Time Frame types: 1) Discrete a single date/ time measure 2) Range - a date/time period with both start and end dates 3) Continuing - has a begin date but no end date
- End Datetime The date/time (GMT) when the activity described in the metadata record was completed
- Start Event The activity (e.g., trip number) that signaled the beginning of the activity described in the metadata record
- End Event The activity that signaled the completion of the activity described in the metadata. Example: The data collection ended with Trip #1405
- Description Narrative description of the time frame



Geographic Area Module





Spatial bounds and geographic description of the catalog item.

Screen Item Descriptions

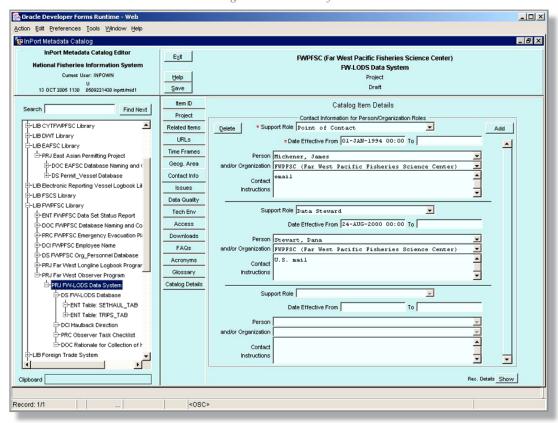
- Eastern Boundary the easternmost longitude in which the data was collected
- Western Boundary the western most longitude in which the data was collected
- Northern Boundary the northernmost latitude in which the data was collected
- Southern Boundary the southernmost latitude in which the data was collected
- Geographic Area the geographic area in which a particular activity documented in the metadata record occurred. Include landmass info, island groups, ocean sector, etc.

Support Roles Module

Each catalog item support role is significant as a job or responsibility for the data described by the catalog item. (E.g., data steward, owner, contributor, etc.). A catalog item Support Role may be that of either a Person or an Organization that has been registered within the InPort Catalog. If a user cannot locate the person or organization that is required for the support role, then the user should report this to their InPort Librarian who can do that registration.



Catalog Editor - Contact Info Tab



Jobs or responsibilities for the data described in the catalog item, including the person and organization assigned to that role.

Screen Item Descriptions

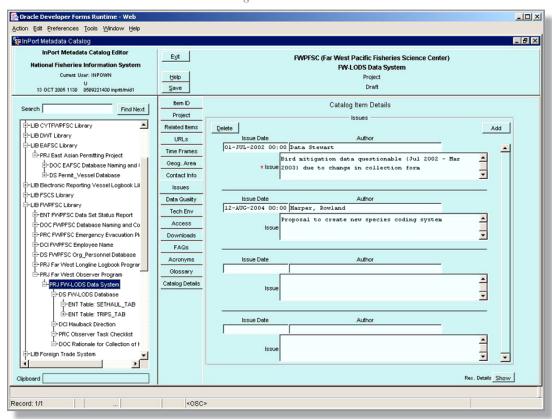
- Role Begin Date Role was active starting on this date
- Role End Date Role becomes inactive on this date
- Name of person Name of the person filling the support role
- Name of organization Name of the organization filling the support role
- Contact Instructions Supplemental instructions on how or when to contact the individual or organization

Issues Module

Each catalog issue is significant as a problem, risk, or question about a catalog item (e.g., project, data set).



Catalog Editor - Issues Tab



List of problems, issues, concerns related to the catalog item.

Screen Item Descriptions

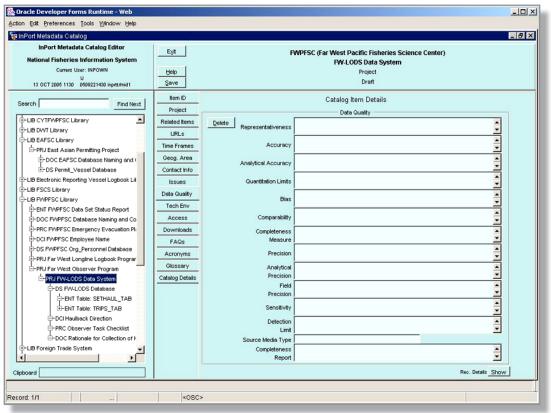
- Author The name for the person reporting the issue
- Issue date The date that the issue occurred or became known
- Issue A detailed description of the issue

Data Quality Module

Details of the quality of the data being documented. These fields are in direct support of the FGDC metadata standard.



Catalog Editor - Data Quality Tab



Details on usage constraints, completeness, and accuracy of the catalog item.

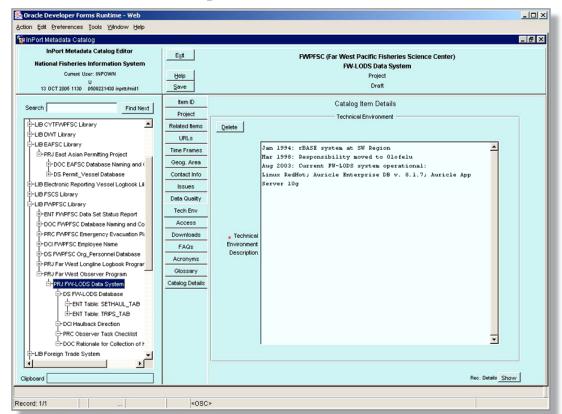
- Representativeness A description of the degree to which the data accurately and precisely represents the frequency distribution of a specific variable in the population of interest
- Accuracy A description of what is known about the degree of agreement between an individual measurement (or the central tendency of a number of measurements) to the true value, including random (precision) and systematic (bias) error associated with all aspects of a measurement system
- Analytical Accuracy A description of the closeness of the values derived from the analytical measurement to the true value
- Quantitation Limits Measure The measure of the quantities of a target variable that can be quantified with the certainty required by the data user
- Bias (Or bias number). A discussion of any systematic or persistent distortions in a measurement process that cause errors in one direction.
- Comparability A description of the confidence that data sets contributing to a common analysis or interpolation were similar
- Completeness Measure The measure that describes the amount of usable data obtained compared to the planned amount.
- Precision A description of what is known about the degree of mutual agreement among individual measurements of the same property under prescribed similar conditions
- Analytical Precision Measure A measure of agreement among individual measurements of the same property in duplicate labora-



- tory samples
- Field Precision Measure A measure of agreement among measurements of the same property in samples collocated or duplicated in the field under prescribed conditions
- Sensitivity Measure The measure of the capability of a method or instrument to discriminate between measurement responses representing different levels of a variable of interest
- Detection Limit Measure The measure that describes the quantity of a sample below which the sample analysis equipment will not detect the analyte accurately
- Source Media Type The medium of the source of the data set (e.g., paper, disc, microfilm)
- Completeness Report Information about omissions, selection criteria, generalization, definitions used, and other rules used to derive the data set.
- Data Use Constraints Text commentary on any issues in the use of a given data set, including explicit description of any limitations or constraints on use of the data

Technical Environment Module

Description of the data set in the producer's processing environment, including items such as the name of the software (including version), the computer operating system, file name (including host-, path-, and filenames), and the data set size. (FGDC F1.13).



Catalog Editor - Technical Environment Tab

Description of the data set in the producer's processing environment, including details such as the name of the software (including version), the computer operating system, file name (including host, path, and filenames), and the data size.



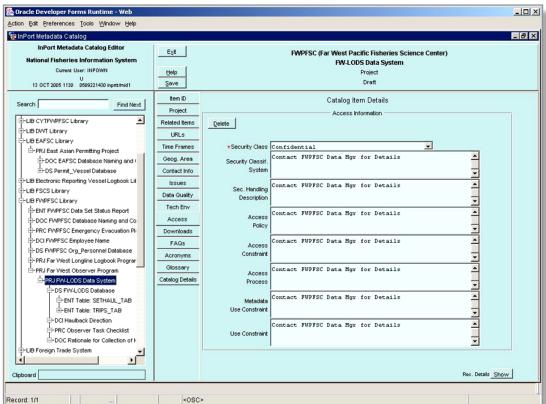
Screen Item Descriptions

Technical Environment - A description of the catalog item's technical environment, including machine name, software, or other special considerations required to use or access the catalog item Access Information

Data Access Module

Information about the methods and constraints of accessing the data represented by the catalog item.

Catalog Editor - Access Tab



Details on the restrictions and legal prerequisites for accessing the data. Includes any access constraints applied to assure privacy or intellectual property and any special restrictions on the use of the data.

- Security Class The level of security assigned by the Data Steward to this catalog item
- Security Classification System Name of handling restrictions on the data set
- Security Handling Description Additional information about the restrictions on handling the data set
- Access Policy General description of the policies governing release of this data
- Access Constraint Restrictions and legal prerequisites for accessing the data set. Includes any access constraints applied to assure privacy or intellectual property and any special restrictions on the use of the data.

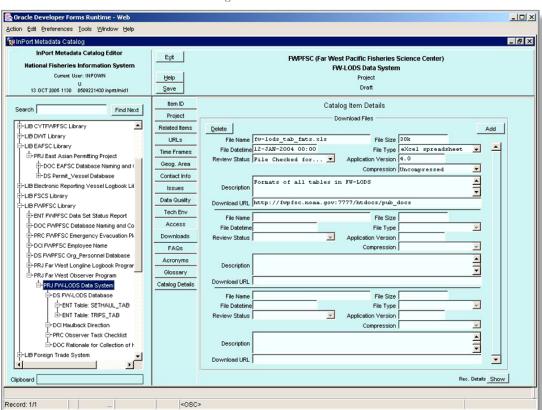


- Access Procedure Narrative description of the steps required to obtain access to the data
- Metadata Use Constraint Restrictions and legal prerequisites for using the metadata after access is granted. Includes any metadata use constraints applied to ensure the protection and privacy of intellectual property, and any special restrictions or limitations on using the metadata.
- Use Constraint Restriction and legal prerequisites for using the data set after access is granted. Includes any constraints applied to ensure the protection of privacy or intellectual property, and any special restrictions or limitations on using the data set.
- Data Use Constraints No help text available for INPOWN. DATA_USE_CONSTRAINTS

< update definition for Data Use Constraints>

Downloads

Each download is relevant as a URL to a downloadable file.



Catalog Editor - Downloads Tab

List of available files, images, and documents for the catalog item with details and links for obtaining them.

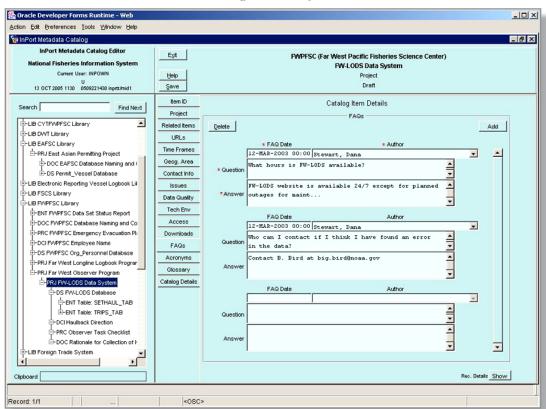
- File Name The name of the file to be downloaded. Include the full path and file extension if necessary.
- File Datetime Date the file was created
- Review Status A description of the level of review of the file to be downloaded. Valid entries include: Not Checked, Metadata Only



- Checked, File Checked for Viruses, File Checked for Inappropriate Content, File Checked for Viruses and Inappropriate Content
- File Size In kilobytes, the size of the file to be downloaded
- File Type A description of the type of file that is available for download. Valid types include (but are not limited to): PDF, ZIP, HTM, DOC, TAR, WK1
- Compression Status The technology used to compress data in the file. Valid entries include: Uncompressed, Zip, GZIP, Z, TAR, GTAR, Unknown
- File Description A brief description of the character and content of the file being downloaded
- **Download URL** The complete Universal Resource Locator (web address) needed to access the file
- Connect Protocol Column not current used
- File Path Column not currently used

FAQs

Each FAQ is significant as a frequently asked question and answer pair about a catalog item (e.g., project, data set).



Catalog Editor - FAQs Tab

List of questions and answers that have been proven helpful to the understanding and use of the catalog item.

- FAQ Datetime The date of the FAQ question and answer. Defaults to system date.
- Author The author of the FAQ question

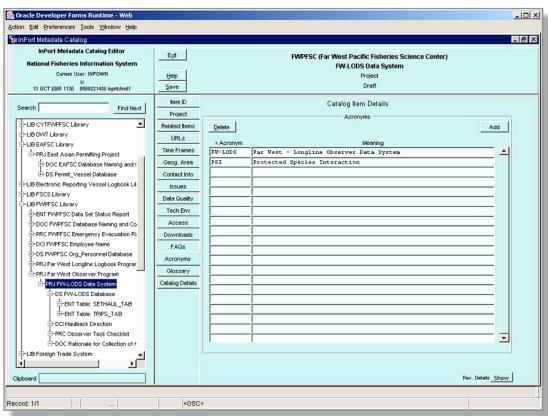


- FAQ Question The FAQ question related to the InPort catalog item
- FAQ Answer The answer to the FAQ question

Acronyms

Acronyms used in the context of the project being documented. Acronyms are restricted to the project level.

Catalog Editor - Acronyms



An abbreviation used in the context of a catalog item.

Screen Item Descriptions

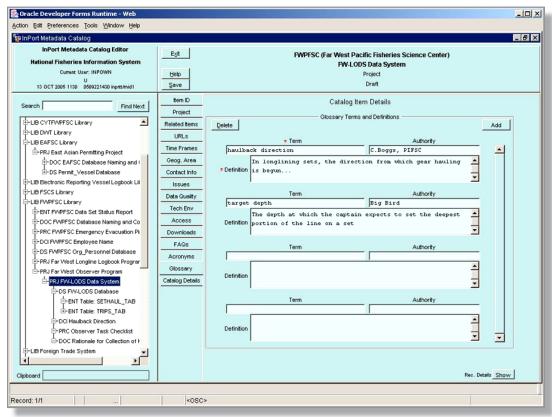
- Acronym A shortened name for the catalog item
- Meaning Text definition of the abbreviated acronym
- Acronym Type Valid acronym types are Abbreviation, Short Name, Long Name, Display Name

Glossary Terms

Each glossary term is significant as a definition of a word or phrase in the context of a catalog item.



Catalog Editor - Glossary Terms



List of terms and definitions specific to the catalog item.

- Term The glossary word or phrase being defined for this catalog
- Authority The authoritative source of the glossary term's definition
- **Definition** The definition of the glossary term within the context of the Catalog Item





5. Catalog Publishing

Catalog Publishing Workflow Overview

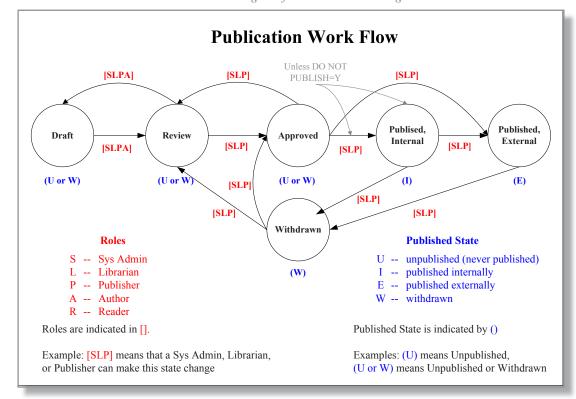
Each Catalog Item (e.g., a data table or data entity) will be in one of six publication control states. The publication control state determines which operations may be performed on the catalog item and which InPort User Roles may perform those operations. For example, the *Published Externally* state means that users (NOAA and public) can search for and view the catalog item. The *Draft* state means that the catalog item is viewable only by users who have been granted access to view or edit that catalog item.

Catalog Workflow Control States

- Draft initial state where most editing occurs
- Review/Revise metadata is entered and ready for review and final editing within this control state
- Approved metadata has been reviewed and is ready for publication. Metadata can no longer be edited without being taken back to Review/Revise state
- Published-Internal metadata is viewable by registered InPort users
- Published-External metadata is viewable by the public
- Withdrawn metadata was previously published but has been withdrawn



Allowable Catalog Workflow Control State Changes





Catalog Item Workflow Rules

Workflow Control State Rules for an Individual Catalog Item

| Control State | Description / Primary Activity | Allowable Op- erations | Minimum Required Role | Next Possible Control States |
|--|---|---|--|---|
| Draft (Edit) | Entry of metadata | Add Child Items Update Delete Read Move Change State | Author Author Author Reader Author Author | Review/Revise |
| Review/Revise (Review) | Review and revision of metadata | Add Update Delete Read Move Change State | Author Publisher Publisher Reader Publisher Publisher | Draft Approved |
| Approved (Approve) | Approved for publication | Add Child Items Read Change State | Author Reader Publisher | Published/Internal Published/External Review/Revise |
| Published/Internal (Publish Internally) | Metadata is made avail- able to internal - regis- tered InPort - users who can search, review and comment on metadata | Add Child Items Read Change State | Author Reader Publisher | Withdrawn |
| Published/External (Publish Externally) | Metadata is made available to the public who can search, review and comment on metadata | Add Child Items Read Change State | Author Reader Publisher | Withdrawn |
| Withdrawn (Withdraw) | Metadata is pulled from publication | Add Child Items Read Change State | Author Reader Publisher | Review/Revise Approved |

Catalog Hierarchy Workflow Rules

Under most conditions, users can change the workflow control state for an item and all its child items. The major exception to this is that advancing Catalog Items from Review/Revise to Approved is only done on an item by item basis. This is to ensure that every published Catalog Item has been digitally signed off by a Publisher that the metadata has been reviewed and Approved.

Draft to Review/Revise

- When a Catalog Item's control state is being changed from Draft to Review/Revise, the user has the option to change the control state of all child catalog items that are also in Draft to Review/Revise
- If the user chooses to update the child item's control state, all children that were not in Draft will remain in their current control state.

Review/Revise to Approved

Each Catalog Item must be Approved individually. This restriction is to ensure that each and every catalog item is reviewed and approved by the Publisher.



 However, if the Catalog Item has child items that are in Withdrawn state - thus had been previously Published and could never have been modified - the user can choose to update any child items that are in Withdrawn back to Approved.

Approved to Published (internal or external)

- When a Catalog Item's control state is being changed from Approved to either Published-Internal or Published-External, the user has the option to change the control state of all child catalog items that are already in Approved to the same new Published state.
- If the user chooses to update the child item's control state, all children that have Do Not Publish checked will not be moved to Published.
- If the user chooses to update the child item's control state, all children that were not in Approved will remain in their current control state.

Published-Internal to Published-External

When a Catalog Item's control state is being changed from Published-Internal to Published-External, the user has the option to change the control state of all child catalog items that are already in Published-Internal to the same new Published-External state.

Published (internal or external) to Withdrawn

When a Catalog Item's control state is being changed from Published-Internal or Published-External to Withdrawn, all child items that have been Published-Internal or Published-External will also be withdrawn.

Withdrawn to Approved

 When a Catalog Item's control state is being changed from Withdrawn to Approved, the user has the option to change the control state of all child items that are in Withdrawn to Approved.

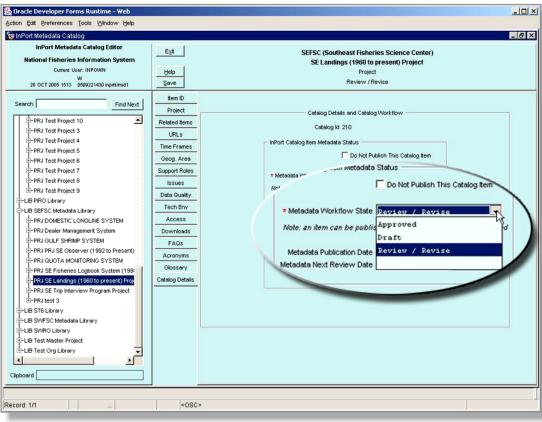
Approved to Review/Revise

When a Catalog Item's control state is being changed from Approved to Review/Revise, the user has the option to change the control state of all child items that are in Approved to Review/Revise.
 CAUTION: This action will rescind approval of all child items. To undo this change, each child item must be individually Approved.

Withdrawn to Review/Revise

When a Catalog Item's control state is being changed from Withdrawn to Review/Revise, the user has the option to change the control state of all child items that are in Withdrawn to Review/Revise. CAUTION: This action will rescind previous approval of all child items. To undo this change, each child item must be individually Approved in order to re-publish.





Changing Catalog Item Workflow State in the Catalog Editor

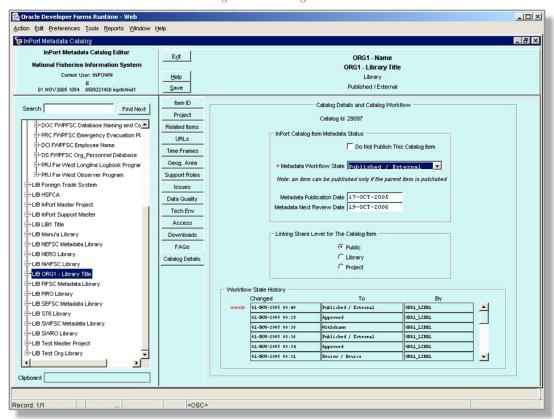
Workflow State can be changed from the Catalog Details tab of the Catalog Editor using the Metadata Workflow State pop-list. The available states listed will be controlled both by the current state of the catalog item and the InPort User Role of the current user per the Catalog Workflow Control State Rules table.

How to Change a Catalog Item's Workflow Control State

- 1. In the Catalog Editor, select the catalog item in the Navigator pane that you wish to change the control state.
- 2. Select the Catalog Details tab.
- 3. Select the desired workflow control state from the Metadata Workflow State pop-list. Note that the available choices in this list is dependant upon the role of the user and the current workflow state of the selected catalog item. Refer to the Workflow Control States table for details on allowable operations and workflow control states.



Catalog Editor - Catalog Details Tab



The Catalog Details tab controls the publication workflow process and additionally allows the user to specify what projects outside the selected catalog item's top-level project can create related links to it (Linking Share Level).

Screen Item Descriptions

- Publication Exclusion Flag Exclude this catalog item and its children from publication, Y/N?
- Metadata Record Control State Current metadata workflow state.
- Record Modified Datetime Date and time of last record update.
- Metadata Review Date The date this (metadata) item should be reviewed next
- Linking Share Level (who can link to this item) Scope of use for the catalog item -- Public -- any published item in any of the catalog Libraries, Library -- any published item in the current Library, or Project -- any published item in the current project

How to Edit a Published Catalog Item

- In the Catalog Editor, select the Catalog Item that needs to be edited.
- 2. From the Catalog Details tab, change the Metadata Control State to Withdrawn. Note that all published child catalog items will also be changed to Withdrawn.
- Change the selected Catalog Item from Withdraw to Review/Revise, remembering to NOT update any child items to Review/Revise.
- Make any needed corrections or additions to the selected Catalog Item.



- 5. Change the selected item's control state to Approved and choose to update any Withdrawn child items to Approved.
- **6.** Change the selected item's control state to Published (internal or external, as needed) and choose to update all Approved child items to the same new state.





6. Catalog Searching

Internal vs. External Publication

Catalog Items that have been Published Internally, that is published only to the InPort user community can be searched through the InPort web site after the InPort user has logged into InPort. Once logged in, the user will be able to search the InPort Catalog and retrieved any items that are either Published-Internal or Published External

Catalog Items that have been Published Externally can be searched by anyone. If an InPort user does not explicitly log into the web site, any search will only be made against Catalog Items that have been Published External.

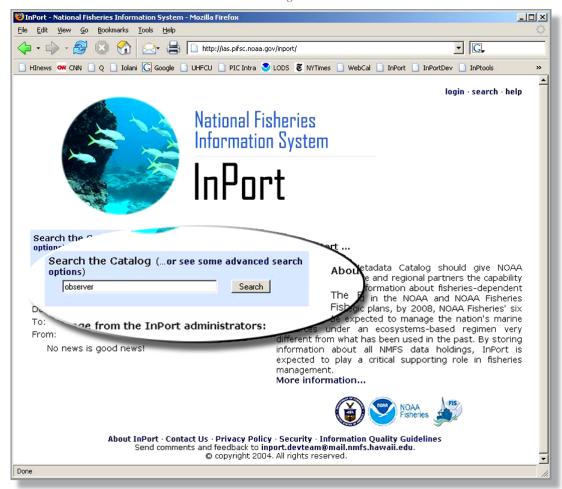
Catalog Search Process

- User enters a text string in the Search text box and clicks the Search button
- Search Results Page is displayed showing all published Catalog Items that contain the text string in the item's Title, Abstract, Notes, or Keywords
- User clicks on a Catalog Item link of interest
- The selected item's Catalog Item Summary Page displayed
- User clicks on the Full Details link to display the selected item's Catalog Item Details Page
- User can click on any parent, child, and related item links on the Catalog Item Details page (Catalog Drill Around), to get more information about items that are related to the currently selected Catalog Item



Text string search

InPort Home Page Search Box

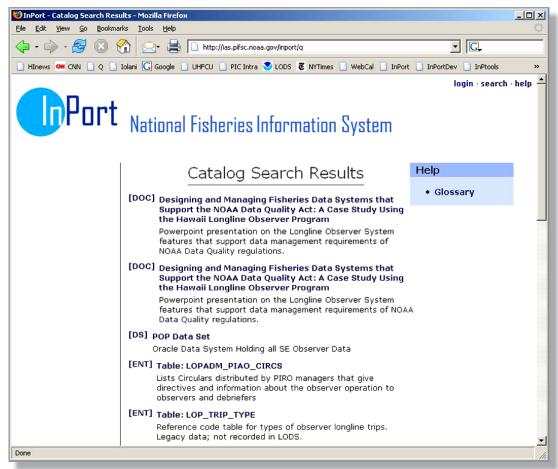


Enter a text string and click the search button to return a list of items where the search string is found in the catalog item's Tile, Abstract, Notes, or Keywords



Search Results Page

Catalog Search Results Page

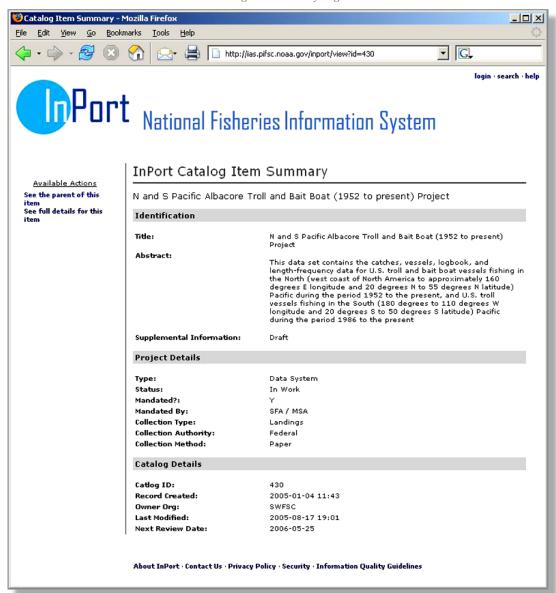


The Catalog Search Results page will list all of the published items that match the user's search criteria. Click on one of the displayed links to drill down to the selected catalog item. The user may use the search box at the bottom of the Search Results page to do a new search.



Catalog Item Summary

Catalog Item Summary Page

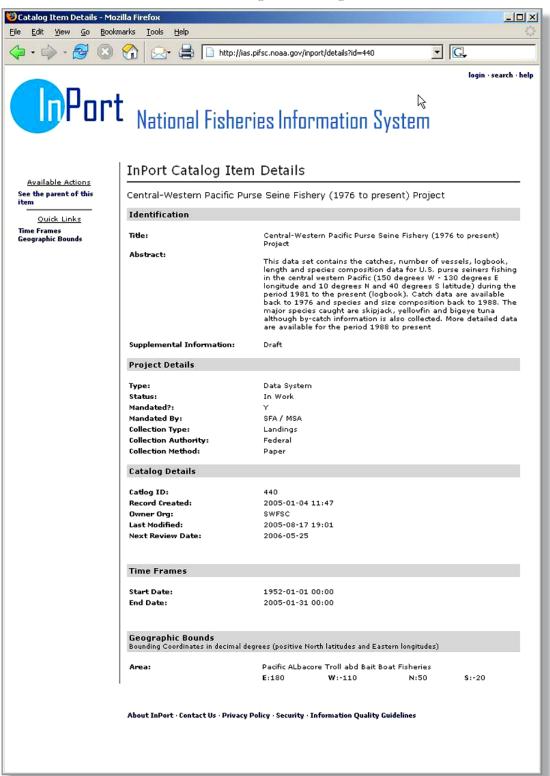


Clicking on a catalog item link in the Search Results page will display a Catalog Item Summary page for the selected item. The user may use the navigation bar links on the left of the page to get complete details about the item or to navigate to the parent item.



Catalog Item Details

InPort Catalog Item Details Page

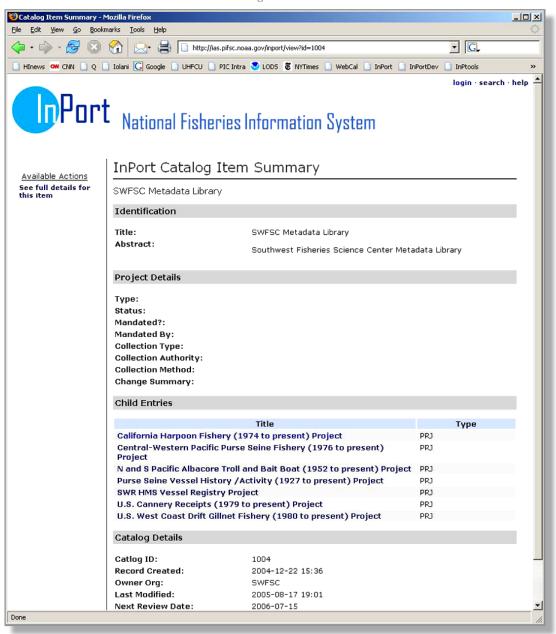


Clicking on the See full details for this item link will display the Catalog Item Details page with all published metadata for the selected item. Use the Quick Links in the navigation bar on the left of the page to navigate to specific detail blocks.



Catalog Hierarchy Drill Around

InPort Catalog Items Drill Around



The user can use drill up and down the catalog hierarchy by using the parent and child item links on the Catalog Item Summary or Catalog Item Details pages. The user can also drill over to Related Catalog Items if any are defined for the selected catalog item.







7. Catalog Batch Loading

Interface to Oracle Databases

InPort can load some entity and attribute information from the data dictionary of an Oracle database. This information includes table and column names, data types and sizes, and comments.

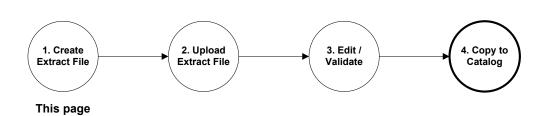
The interface was created because many of the databases relevant to FIS currently use Oracle.

The interface between InPort and the Oracle database runs in four stages.

| Stage | Description | Programs |
|-------|--|---|
| 1 | Create a metadata extract file from the Application database. | SQL*Plus scripts run against an Oracle database contain application data relevant to FIS. |
| 2 | Upload the extract file into staging tables in an InPort Project. | InPort Web-Site, Batch Upload page. |
| 3 | Edit and validate the entity and attribute data in the staging tables. | Oracle Forms – Batch Load |
| 4 | Copy the entity / attribute data into the InPort catalog. | Oracle Forms – Batch Load |

Stage 1 - Creating the Extract File

InPort Metadata Interface to Oracle Databases



Prerequisite and Assumptions

- The user has an Application with data relevant to the FIS program (e.g., permits, logbook)
- The Application runs on an Oracle8i/9i/10g database.
- The Application has comments on all important tables, views, and columns
- The operator, the person running the extract, knows how to use SQL



- and SQL*Plus.
- The operator has a working knowledge of the Application being extracted.
- The Application DBA may be needed to modify a view (inpx2.sql) to include all tables / views in the application.

Summary of Steps

Step 0: Download and uncompress the extract scripts and documentation.

- Download the extract scripts from: http://download_page
- Create a folder or directory (Extract Folder) to hold the extract scripts and the extract files.

Uncompress the files into the Extract Folder.

Step 1: Pick an Oracle username (user account) to use to run the extract script. Grant the required privileges (inpx1.sql) to the username.

We recommend using the username that owns the majority of the Application tables.

As SYS, run inpx1.sql to give the required privileges to the username.

```
SQL> @inpx1.sql
Enter the username that will be used to run the In-
Port extract.
InPort Extract Username: inpown
```

Step 2: Run a QA report (inpx4.sql). Correct table/column comments, if necessary.

See Appendices for notes on how to change directories in SQL*Plus (Windows).

Login as the extract owner and run inpx4.sql. Inpx4.sql requires one input, appname, which it uses to prefix an output file, <appname>-qa.lis.

```
SQL> connect inpown/password@inprtd
Connected.
SQL> @inpx4
...
Enter value for appname: INPTEST
Review the output file, INPTEST-qa.lis. Correct and update comments as needed.
```

Step 3: If necessary, modify inpx2.sql to include or exclude tables. Rerun inpx4. sql and review missing comments.

Inpx2.sql defines a view inport.my_tables_views_v that should return one row for every table and view you want to include in the extract.

If you modify inpx2.sql, you must save the changes as inpx2.sql. Both inpx4.sql and inpx5.sql will call inpx2.sql.

Step 4: Run the extract (inpx5.sql).

```
SQL> @inpx5
Enter a short application name code.
It will be used as a prefix for output file names.
Example: Application name INPRTDV
Outputs: INPRTDV-qa.lis will contain missing comments
    report
```



INPRTDV-extract.lis will contain the extract report Application Name: INPTEST

Inpx5.sql will create the extract file INPTEST-extract.lis.

How to Create the Extract File - Stage 1 Batch Loading

Script List

| Item | File Name | Description | Usage (steps) |
|------|-----------|--|---------------|
| 1 | inpx1.sql | Grants SELECT privileges to extract username. This should be run by the DBA to grant required privileges to the extract user. This script is not needed, in most cases. You will typically run the extract from an existing username that already has all required privileges. | Step 1 |
| 2 | inpx2.sql | Creates a view inport\$my_tables_views_v that should list each user application table and view. This view can be modified by the user to include or exclude tables and views. | Steps 2, 3 |
| 3 | inpx3.sql | Creates two views, inport\$tables_views_v and inport\$columns_v. It calls inpx2.sql. | Steps 2, 4 |
| 4 | inpx4.sql | Quality Assurance reports. Includes lists of application tables/views, referenced tables/views, and missing comments. It calls inpx2.sql and inpx3.sql. Inputs: <appname> no spaces in the name Outputs: File <appname>-qa.lis</appname></appname> | Steps 2, 4 |
| 5 | inpx5.sql | Creates InPort extract file. It calls inpx2.sql and inpx3.sql. It drops the three inport\$ views at the end. Inputs: <appname> no spaces in the name Outputs: File <appname>-extract.lis</appname></appname> | Step 4 |

Extract Steps

Step 1: Designate an Extract username

Choose the Oracle username (user account) to run the extract script. The user account must have the privileges listed below. Although any username with access to the system data dictionary can be used, we recommend using the username that owns the main application schema.

Privileges Needed by the extract username

The username will require the following privileges to run the extract script: CREATE SESSION and CREATE VIEW.

These privileges must be granted by the DBA to the username by running inpx1. sql.

| Filename | inpx1.sql |
|-------------|--|
| Description | Grant the privileges to the extract username |



| Instructions | Run from sql*plus. Login as SYS, then run the script: sql>@inpx1.sql |
|--------------|--|
| Inputs | Oracle extract username |
| Outputs | None |

Example

The Observer application stores most of its tables under one username, OBSOWN. OBSOWN does not have the privileges listed above. So, we ask the DBA to run inpx1.sql as SYS.

Login as SYS:

```
SQL> @inpx1
Enter the username that will be used to run the ex-
    tract scripts.
InPort Extract Username: obsown
```

Step 2: Run QA Reports (inpx4.sql)

| Filename | inpx4.sql |
|--------------|--|
| Description | Spools four QA reports to a file <appname>-qa.lis. (1) "App Tables and Views" (app tables and views that will be extracted) (2) "Related Tables and Views" (other tables referenced in views and foreign key constraints), (3) "Missing Table/View Comments" (4) "Missing Column Comments" Use these reports to review the tables/views that will be included in the extract.</appname> |
| Instructions | Run from SQLPLUS. Login as extract username. sql>@inpx4.sql |
| Inputs | <appname> application name Example: OBSDV</appname> |
| Outputs | An extract file named <appname>-qa.lis Example: OBSDV-qa.lis</appname> |

The inpx4.sql script prints out a list of tables, views, and columns that do not have comments.

It provides a simple quality check of your data dictionary documentation before you run the extract. After checking the report, update table/view and column comments, if necessary.

Inputs: The script will prompt you for an APPNAME. That APPNAME will be used as a prefix to the output file.

Example: APPNAME=OBSDV will result in a report file named OBSDV-qa.lis.

Example

```
Login to sqlplus as the extract username.
sql> @inpx4.sql
...
Enter value for appname: OBSDV
```



```
Fisheries Information System -- NOAA Fisheries
                                                                                         Page: 1
            InPort -- App Tables and Views Listing (QA) Type Table/View
NEWOBS TABLE BILLFISH_LEGACY
NEWOBS TABLE BILLFISH_LEGACY_BKP
NEWOBS TABLE BILLFISH_LEGACY_HIST
NEWOBS TABLE BIRDS
NEWOBS TABLE BIRDS_HIST
NEWOBS TABLE BIRD_MITIG
Fisheries Information System -- NOAA Fisheries
                                                                                          Page: 1
             InPort -- Related Tables and Views Listing (QA)
            Type Table/View
Owner
______
DSC TABLE DSC_VIEW_COL_STAT
HLMODEL TABLE HLPWDS
OPDT TABLE OBSBILLTAB
OPDT TABLE OBSCATCHTAB
OPDT TABLE OBSPSITAB
OPDT TABLE OBSPSITAB
Fisheries Information System -- NOAA Fisheries
                                                                                         Page: 1
                          InPort Missing Table/View Comments (QA)
                   Type Table/View
_____
DSC TABLE DSC_VIEW_COL_STAT
HLMODEL TABLE HLPWDS
NEWOBS TABLE BILLFISH_LEGACY
NEWOBS TABLE BIRDS
NEWOBS TABLE BIRDS_BKP
Fisheries Information System -- NOAA Fisheries
                                                                                          Page: 1
InPort Missing Column Comments (QA)
Owner Table/View Column Name
DSC DSC_VIEW_COL_STAT COLUMN_NAME
DSC DSC_VIEW_COL_STAT OWNER
DSC DSC_VIEW_COL_STAT PERCENT_NULLS
DSC DSC_VIEW_COL_STAT VIEW_NAME
HLMODEL HLPWDS PWD
HLMODEL HLPWDS REALVAL
HLMODEL HLPWDS USERNAME
NEWOBS BILLFISH_LEGACY_BKP CLEITH_KEEL_LEGACY_BKP
                                                         USERNAME
CLEITH_KEEL_LEN
```

Based on the report results, you may want to update the table, view, or column comments in your database. See inpx2.sql for examples of how to add table and column comments to your data dictionary.



Step 3: Optional – Modify extract script inpx2.sql

The script inpx2.sql creates a view, inport\$my_tables_views_v, that should list all tables and views you want to include in the extract.

| Filename | inpx4.sql and inpx2.sql |
|--------------|--|
| Description | Creates a view inport\$my_tables_views_v that should list each user application table and view. The view can be modified by the user to include or exclude tables and views. Requires privileges granted from inpx1.sql. |
| Instructions | Run from SQLPLUS. Login as extract username. sql>@inpx2.sql sql> SELECT * FROM inport\$my_tables_views_v; If the listing includes all your application tables/views, continue to step 3. Otherwise, you can modify the view definition in the script to include or exclude specific tables or views. Note: Steps 3 and 4 run the inpx2.sql script so you must save the modified view definition as inpx2.sql. |
| Inputs | N/A |
| Outputs | Creates a view. |

The original view selects all tables and views owned by the extract username.

The inport\$my_tables_views_v view can be modified to include or exclude other tables.

Example:

1) Here is the original view

```
1 CREATE OR REPLACE VIEW inport$my tables views v
 2 AS
 3 SELECT owner, object_type, object_name
 4 FROM all_objects
5 WHERE object_type IN ('TABLE', 'VIEW')
 6 AND owner IN (USER)
                                       -- add usernames
  you want to include
 7 AND object_name NOT IN
                                       -- add table_names
  you want to exclude
 8
   ('INPORT$COLUMNS V'
     , 'INPORT$TABLES_VIEWS V'
     , 'PLAN_TABLE'
10
      , 'INPORT$MY_TABLES_VIEWS_V'
11
13 /
COMMENT ON TABLE inport$my_tables_views_v IS
'InPort extract view. DROP after extract. Each row repre-
  sents a table/view needed in the InPort extract.'
```

2) For the InPort application, we want to include tables and views stored in INPOWN and DSC. We will also run the script as INPOWN.

We want to exclude any table named TEST. And, we want to exclude a table named dsc.PERSONS, but include a table named inpown.PERSONS.

```
1    CREATE OR REPLACE VIEW inport$my_tables_views_v
2    AS
3    SELECT owner, object_type, object_name
4    FROM all objects
```



```
5 WHERE object_type IN ('TABLE', 'VIEW')
 6 AND owner IN (USER, 'DSC')
                                      -- add usernames
  you want to include
 7 AND object name NOT IN
                                      -- add table names
  you want to exclude
   ('INPORT$COLUMNS V'
9 , 'INPORT$TABLES_VIEWS_V'
10 , 'PLAN_TABLE'
11 , 'INPORT$MY_TABLES_VIEWS V'
11a , 'TEST'
12 )
12a MINUS
12b SELECT 'DSC' owner, 'TABLE' object type 'PERSONS' ob-
  ject name FROM DUAL
```

Edits made to the script:

Line 6 – Added the username DSC. Since we are running the script as IN-POWN, the USER function will evaluate to INPOWN and we do not need to include it again.

Line 11a – Added TEST to the list of tables to exclude.

Lines 12a, 12b - Subtracted table dsc.persons from the list of tables in DSC and INPOWN.

3) Then, save the modified view definition back to inpx2.sql.

Step 4 -- Generate the extract listing with inpx5.sql

Login as the extract username in SQLPLUS. Run the inpx5.sql script.

| Filename | inpx5.sql |
|---------------------|---|
| Description | Generate extract listing. |
| Instructions | Run from SQLPLUS. Login as extract username. sql>@inpx5.sql |
| Inputs | The script will prompt you for an appname. The appname is used as the prefix on the output file name. <appname> application name Example: INPRTDV</appname> |
| Outputs | An extract file named <appname>-extract.lis Example: INPRTDV-extract.lis</appname> |
| Disk Space Reqs. | The extract generates almost 4300 bytes per record (table, column, or view). The PIFSC Observer system for example, will generate a 54 MB file. For example: 100 tables x 50 columns per table x 4300 = 20.5 MB. |

Script Notes

inpx2.sql

The inpx2.sql script creates a view of tables/views used or owned by your application.

Script Listing

```
REM Create view inport$my tables views v
CREATE OR REPLACE VIEW inport$my_tables_views_v
SELECT owner, object_type, object_name
```



```
FROM all objects
WHERE object type IN ('TABLE', 'VIEW')
AND owner IN (USER)
                                -- add usernames you
  want to include
AND object name NOT IN
                                   -- add table names you
  want to exclude
  ('INPORT$COLUMNS V'
  , 'INPORT$TABLES_VIEWS V'
   , 'PLAN TABLE'
   , 'INPORT$MY TABLES VIEWS V'
COMMENT ON TABLE inport$my tables views v IS
'InPort extract view. DROP after extract. Each row repre-
  sents a table/view needed in the InPort extract.'
COMMENT ON TABLE inport$my_tables_views_v IS
'InPort extract view. DROP after extract. Each row repre-
   sents a table/view needed in the InPort extract.'
COMMENT ON COLUMN inport$my tables views v.owner IS
'Owner of the table or view'
COMMENT ON COLUMN inport$my tables views v.object type IS
'Object type: VIEW or TABLE'
COMMENT ON COLUMN inport$my tables views v.object name IS
'Table name or view name'
```

inpx3.sql

The inpx3.sql script creates two views to extract table and column specifications plus comments:

inport\$tables_views_v

- Includes: All tables in inport\$my_tables_views_v
- Plus: Any table or view referenced by tables or views in inport\$my_ tables_views_v,
- Minus: Tables or views belonging to SYS, SYSTEM, PUBLIC, ODM, ODM_MTR, CTSYS, MDSYS, ORDSYS, OUTLN, WMSYS, or XDB.

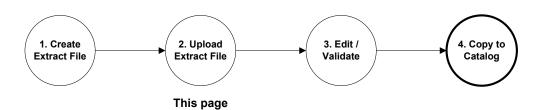
inport\$columns_v

• Includes: Columns belonging to tables in inport\$tables_views_v.

Stage 2 -- Uploading the extract file

In Stage 2, the user will access the InPort web-site to copy the extract file to staging tables in an existing InPort Catalog Project.

InPort Metadata Interface to Oracle Databases





Prerequisites

- The operator is an authorized InPort Librarian, Publisher, or Author.
- The operator knows his or her InPort username and password.
- The operator has the extract file from stage 1.
- The operator will run the upload from a Windows PC running Internet Explorer 6 or Mozilla / Firefox.
- An InPort Project has been created to hold the extract file. (Example: For Pacific Island Region Observer Data, we may create a project for a "Pacific Island Region Observer Program.")

Summary of Steps

- Go to the InPort Batch Upload page
- Select a Project for Upload.
- Enter Upload Details (Name, notes, filename).
- · Upload the file.

How to Upload the Extract File - Stage 2 Batch Loading

- Login to the InPort web-site. (See section on How to Login to InPort.)
- 2. From the *InPort Publishing* page, click on the Batch upload processing link
- 3. Select a catalog Project by clicking on the *Batch Load* button next to the desired Project.
- 4. On the *Batch Upload* page, enter a Name to call the new batch load, and any additional Notes that would help describe the batch file. Note that the Name you pick should describe the database and extract date, e.g., PIR Observer, 4/14/05.
- 5. Enter the File name of the extract. You may use the *Browse* button to locate the file in your local system.
- Click on the *Upload* button. You may wish to navigate back to the InPort Publishing page to access the Catalog Editor in order to confirm that

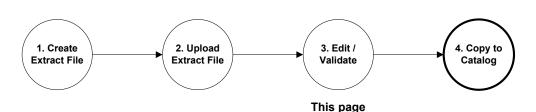
<Insert image of InPort Batch Load page>

<Insert image of completed Batch Upload page>

Stage 3 -- Edit/Validate the Upload Batch File

In stage 4, you will make any changes to the table and column specifications you uploaded in stage 2. You will also run a simple validation check for any inconsistencies in the table and column specifications (e.g., columns without tables).

InPort Metadata Interface to Oracle Databases





Prerequisites

- The operator is an authorized InPort Librarian, Publisher, or Author.
- The operator knows his or her InPort username and password.
- The operator knows how to use Oracle Forms.
- The extract file, from Stage 2, has been successfully uploaded
- The operator will "Load the Staging Tables" from a Windows PC running either Mozilla Firefox or Internet Explorer 6.0.
- An InPort Project has been created to hold the extract file. (Example: For Pacific Island Region Observer Data, we may create a project for a "Pacific Island Region Observer Program.")

Summary of Steps

- Load the batch file into the Staging table area
- Validate the batch table
- Edit Entity/Attribute (table/column) information if needed to pass validation
- Upload the staging table to a Catalog Data Set

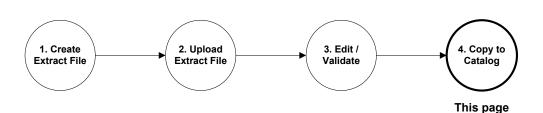
How to Edit/Validate a Batch Upload File

- From the InPort Publishing page, click on the InPort Catalog Tools link and log into the application.
- 2. Click on the Table/Column Loader button.
- 3. In the Table/Column Loader tool, select a batch name from the pop-list and click on Load
- Click on the Validate tab and then select the name of the desired batch load file from the Select Loaded File pop-list. Click on the Validate button.
- 5. Click on the Edit tab and select a file to Review/Edit
- 6. Use the Select Items to Review/Edit pop-list to choose which items to edit (all or only errors on tables or columns)
- Edit the entity/attribute (table/column) information as needed.
- 8. Click Save.
- 9. If validation had failed, repeat the Validation steps

Stage 4 -- Copy Batch File to InPort Catalog

In Stage 4, the user will copy the validated contents from the staging tables into the InPort catalog.

InPort Metadata Interface to Oracle Databases





Prerequisites

- Same as Stage 3
- An InPort Data Set has been created to hold the entities and attributes (tables and columns)

Summary of Steps

- Select validated batch data
- Select a Data Set to copy into
- Load the batch data into the catalog Data Set
- Review the newly created Entities and Attributes in the CATALOG EDITOR

How to Import Batch data into the InPort Catalog

- 1. In the Table/Column Loader tool, select the Catalog tab.
- 2. Select a Validated File from the pop-list
- 3. Select a Catalog Data Set from that pop-list.
- 4. Add any additional comments in the Notes field as needed.
- 5. Click the *Import* button.
- 6. Use the Catalog Editor tool to review the contents of the Data Set and to complete the InPort publication process for the new tables and columns

How to Re-import Batch data into the InPort Catalog

- 1. In the Table/Column Loader tool, select the *Catalog* tab.
- 2. Select a Previously Cataloged File from the pop-list
- 3. Select a Catalog Data Set from that pop-list.
- 4. Add any additional comments in the Notes field as needed.
- 5. Click the *Import* button.
- 6. Use the Catalog Editor tool to review the contents of the Data Set and to complete the InPort publication process for the new tables and columns.
- <insert Image tc loader, load tab>
- < insert Image tc loader, validate tab>
- < insert Image tc loader, edit tab>

Table/Column Loader - Catalog Tab

< insert Image - tc loader, catalog tab>

The Notes field will show a history of the loading process. Clicking on the Import button will copy the contents of the staging tables into the selected catalog Data Set









Appendix A - Glossary of Terms

General Terms

The following list contains definitions of some of the terms used within the InPort metadata catalog system.

Catalog Batch Loading - InPort can load some entity and attribute information from the data dictionary of an Oracle database. This information includes table and column names, data types and sizes, and comments.

Catalog Hierarchy - Catalog items may be organized in a hierarchy that defines the parent-child relationships between catalog items. Each catalog item may belong to one-and-only-one parent catalog item. Each catalog item may be the parent of one or more catalog items. Each catalog item may not be the parent of itself. There are specific rules about which catalog item types may be children of other catalog item types (see InPort User Guide for details).

Catalog Item - A searchable record that describes fisheries dependent or independent information of significance to NOAA Fisheries. There are nine types of catalog items: Projects, Data Sets, Data Entities, Documents, Domains, Procedures, Models, and Data Collection Items

Catalog Item Identification - Basic information about the identification, purpose, and location of the catalog item

Catalog Workflow Control - Each Catalog Item (e.g., a data table or data entity) will be in one of six publication control states. The publication control state determines which operations may be performed on the catalog item and which InPort User Roles may perform those operations.

Data Standard - Information that defines a standard method of storing, managing, and using a specified type of data in a database

Detail Module - Detail Modules may be used to describe individual Catalog Items in greater detail. For example, a database table (Data Entity) may be described by listing its columns (Data Attributes); a Data Collection Item can be further described using a Time Frame to define when is was collected and a Procedure for how it was collected.

Event History - List of events relating to the catalog item, including dates, event descriptions and persons involved

InPort Author - InPort User Role that allows the person to create and edit metadata in their assigned InPort Library while the metadata is in Draft state

InPort Catalog - the collection of InPort Libraries that contain the metadata for cataloged information items.



InPort Data Steward - InPort Data Stewards have the same catalog privileges as an InPort Reader but have the ultimate responsibility of authorizing or rejecting InPort Catalog Access Roles for their InPort Library.

InPort Librarian - An InPort Librarian can create and manage catalog Persons and InPort user accounts for their Metadata Library. Librarians can create and manage catalog project access requests, authorizations and rejections. Librarians create new organizations under their Organization and can create and manage catalog project folders under their Metadata Library.

InPort Library - an organization's Metadata Project. The Inport Catalog contains many InPort Libraries.

InPort Organization - Organization unit or business or professional entity (e.g., division, department, etc.) that is registered in the InPort Catalog

InPort Person - A person that is registered in the InPort Catalog. People that serve in data support roles for catalog items and/or InPort User Roles are required to be registered in InPort

InPort Publisher - InPort Publishers manage the review of metadata and ensure that quality assurance processes are completed. Publishers should give feedback and advice to InPort Authors on metadata quality and sufficiency. Publishers are responsible for web publication, either internally or externally, and for withdrawing metadata for correction or further review. Publishers will monitor metadata issues activity and ensure that issues resolution occurs in a timely fashion.

InPort Reader - InPort Readers review catalog items through the Catalog Editor or log onto the InPort web site to search and view internally published catalog items. Readers do not have any edit abilities. Readers are responsible for reporting any metadata issues.

InPort User Role - The privileges and responsibilities of an InPort user within the InPort Catalog and/or InPort Libraries and Projects. Current roles include InPort Administrator, InPort Librarian, InPort Author, InPort Publisher, InPort Data Steward, and InPort Reader

Organization Assignment - Controls the InPort Libraries in which an InPort Person may be granted InPort User Roles

Published-External - Catalog items published to the general public and are available in InPort web search.

Published-Internal - Catalog items published in a restricted mode and available in InPort web search to InPort Users that are currently logged into the InPort web site

Record Details - Auditing details (date of change, changed by) for a given record

Catalog Item Types

The following is a list of the major types of objects for which metadata is collected in InPort. The acronym (in brackets) is used in the search results to denote the type of the catalog item.

Project [PRJ] - project type catalog items can be thought of as metadata folders.



A Project folder might, indeed, describe a real-life data project, it might also be used as a convenient way to describe a set of related items under which each of the collected items may be cataloged.

Data Set [DS] - a catalog item of type Data Set can describe a Database, a collection of related data Files, or a user defined collection, as described in its Abstract.

Data Entity [DE] - a catalog item of type Data Entity can describe a data table, a data file, a data report, a spreadsheet, a data entry form with data, an xml file, or other user defined information item that itself contains data attributes (columns or fields). Data Entities are most frequently thought of as Tables. Data Entities normally are child items of a catalog Data Set.

Document [DOC] - any existing document that relates to the parent catalog item. If a document contains data, and thus needs to be described with procedures or attributes, then it should probably be cataloged as a catalog type Data Entity.

Procedure [PRC] - a procedure, protocol, or process that is relevant to the parent catalog item

Data Collection Item [DCI] - the description of the collection of a specific type of information within a data collection project/effort, such as trip number, sea-surface temperature, and hook type. A well documented data collection system will include information on the history, purpose, collection methods, and business rules for each type of information, or data collection item, which is collected.

Detail Modules

The following is a list current "detail modules" collected for items cataloged in the InPort:

Acronyms - An abbreviation used in the context of a catalog item

Data Access - Details on the restrictions and legal prerequisites for accessing the data. Includes any access constraints applied to assure privacy or intellectual property and any special restrictions on the use of the data

Data Attribute - A piece of data collected and stored in a table, field, cell, or form or a calculated value. Data attribute records always reside under a Data Entity parent item.

Data Quality - Details on usage constraints, completeness, and accuracy of the catalog item

Downloads - List of available files, images, and documents for the catalog item with details and links for obtaining them

FAQs - List of questions and answers that have proven helpful to the understanding and use of the catalog item

Geographic Area - Spatial bounds and geographic description of the catalog item.

Glossary Terms - List of terms and definitions specific to the catalog item



Issues - List of problems, risks, or questions about a catalog item

Related Items - List of catalog items that have a user defined relationship to another catalog item

Support Roles - List of people and organizations with jobs or responsibilities for the catalog item

Technical Environment - Description of the data in the producer's processing environment, including details such as the name of the software (including version), the computer operating system, file name (including host, path, and filenames), and the data size

Time Frames - List of temporal limits of the catalog item which can be based on either time/date or an event, (e.g., trip)

URLs - List of internet addresses that are relevant to the catalog item

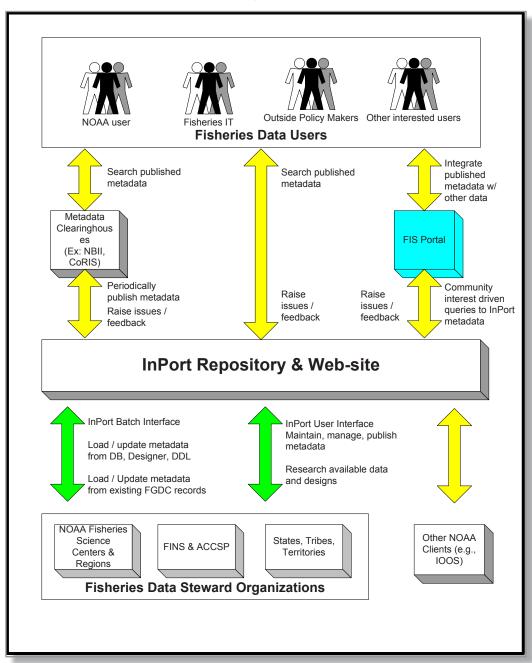






Appendix C - InPort Architecture

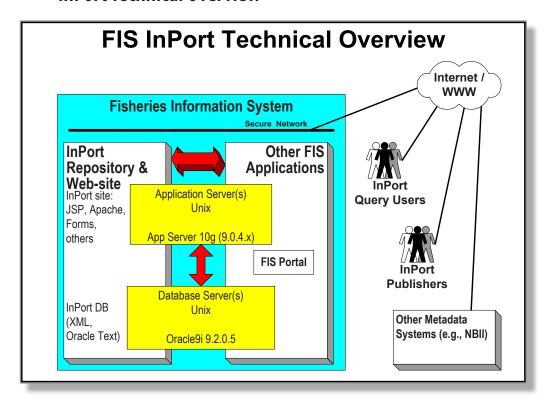
FIS InPort



InPort has been identified as a core tool for developing the National Fisheries Information System.



InPort Technical Overview



InPort Technical Environment

- · Designed to run in the FIS technical environment
- FIS technical environment
- Database Oracle9i (9.2.0.5)
- Application Server 10g (9.0.4)

Major Components

- Search and Retrieve Published Catalog Items (JSP, PSP)
- Data Entry and Publication (Oracle Forms 10g)
- Database (Oracle9i, XML, Oracle Text)
- Interfaces (Inbound / Outbound)

Search and Retrieve

• JSP, Apache Web application

Simple Search

- Searches all published catalog items
- Enter one or more search words. Search results include any item that matches ALL search words.
- Uses Oracle Text Context indexes

Internal/External Search

• Internal searches cover Catalog Items published Internally (to FIS Partners). This requires a login. Results are encrypted over HTTPS.



External searches cover Catalog Items published Externally. These are publicly available.

Future: Advanced Search

- Search of individual fields or keywords
- Use Oracle Text for complex searches

Data Entry and Publishing

- Oracle Forms (9.0.4)
- Requires users to download and install Jinitiator
- Runs over HTTPS

Main Applications

- Library Manager Administrative functions
- Catalog Editor Metadata entry, maintenance and publishing of catalog items and catalog hierarchy

Database

Uses Oracle XML API

To generate XML docs in response to Search queries

Uses Oracle Text

- To support searches of eight fields:
 - Title
 - Name
 - Abstract
 - Notes
 - Theme Keywords
 - Place, Keywords
 - Temporal Keywords
 - Stratum Keywords
- Future
 - Use controlled thesauri for keywords
 - Expand InPort us of the Context search engine

Basic Design

- Catalog uses a hierarchical design
- Catalog Related Items allows reference links between one catalog item and another. Reduces redundancy.
- PL/SQL APIs for most complex data manipulation and retrieval
- View layer for all Forms and Web access

InPort Interfaces

Outbound

- Search results are XML docs
- Future: More XML documents



Inbound

- Flat file upload of Oracle8i/9i/10g data dictionary extracts Future: XML based exchange format





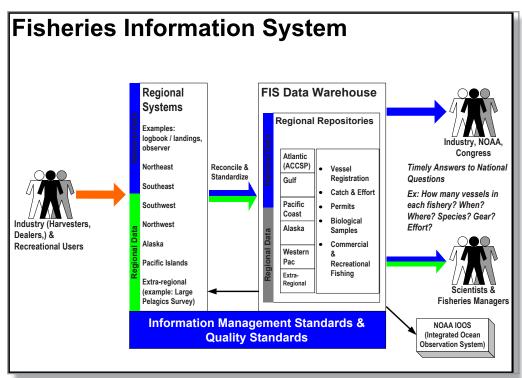


Appendix D - National Fisheries Information System

National Fisheries Information System

FIS was first described in broad terms in section 401 of the Magnuson-Stevens Act (1996 amendments). FIS was described in more detail in the Proposed Implementation of a Fishing Vessel Registration and Fisheries Information System [7].

Some of the major objectives of FIS are a standardization of critical information (e.g., vessel, gear, regions, effort, trips, and time), non-duplicative integration, timely reporting, and confidentiality. It is also supposed to minimize the paperwork burden on fishermen.



FIS Model

The proposed FIS model is founded on the development of information management standards and data quality standards that will allow timely integration and analysis of Fisheries Dependent data.





Appendix E - InPort Library Request Form

 $In Port\ Library\ Request\ Form$

<insert pdf of InPort Library Request Form>





Appendix F - InPort FAQs

- Q. How should I show a version number of the data object that I am trying to catalog?
- A. If you have multiple versions of a data set (or any other catalog item type), you should make sure that you include the version number in the *Title* and/or *Name* of the Catalog Item (*Item ID* tab of the Catalog Editor). This implies that you will still have the previous version maintained in your InPort Library and that after publication, both versions of the catalog item will be returned in the InPort Search Results. Having the version number in the Title will allow the user performing the search to select the most appropriate version. By created a Related Item link between the two versions, anyone reviewing the details of one version would be able to drill over to the other version.

Index

| C | 64, /6, //, 111 | Creating the Extract File 95 |
|--|--|---|
| Catalog Batch Loading vi, 95, 109 | н | Edit/Validate the Upload Batch File 103 |
| Catalog Detail Modules 64 | Hole 10 | Uploading the extract file 102 |
| Acronyms 76 | Help 19 | _ |
| Data Access 73 | I | 0 |
| Data Quality 70 | | Organization 27 |
| Downloads 74 | InPort Catalog 1 | Organization Assignment 32 |
| FAQs 75 | Content 4 | 0.18mm2me1011.12018611 |
| Geographic Area 68 | InPort User Roles 5 | P |
| Glossary Terms 76 Issues 69 | InPort Administrator 3, 6, 25, 26, | Password 35 |
| Related Items 64 | 27, 28, 29, 37, 39 InPart Author, 6, 14, 25, 26, 68 | Pending User Role Request 39 |
| Support Roles 68 | InPort Author 6, 14, 25, 26, 68, 103, 104 | Persons 30 |
| Technical Environment 72 | InPort Data Steward 6, 14, 25, 26, | Published-External v, 79, 82, 110 |
| Time Frame 67 | 68, 103, 104 | Published-Internal v, 79, 82, 87, 110 |
| URLs 66 | InPort Librarian 6, 14, 25, 26, 68, | Publishing 7, 11, 12, 13, 43, 103, 104 |
| Catalog Hierarchy iii, v, vi, x, 4, 5, 81, | 103, 104 | 1 451611119 7, 11, 12, 10, 10, 100, 10 |
| 92, 109 | InPort Publisher 6, 14, 25, 26, 68, | R |
| Catalog Items 3 | 103, 104 | Related Items v, viii, xi, 47, 50, 53, 57 |
| Catalog Item Identification 44 | InPort Catalog Tools 14 | 59, 61, 64, 65, 112, 117 |
| Data Attributes 54 | Catalog Editor 43 | Reporting Issues 2 |
| Data Collection Item 61 | InPort User Manager 34 | Role Requests 38 |
| Data Entity 52 | InPort User Role Manager 36 | • |
| Data Set 50 | Library Manager 26 | S |
| Document 57 | InPort Functions 2 | Support Roles v, 68, 112 |
| Procedure 59 | Catalog Administration 3 | • • |
| Project 45 | Catalog Extractions 4 Catalog Maintenance 3 | Т |
| D | Catalog Searching 3 | Technical Environment v, vii, xi, 48, |
| D 4 | InPort User Account Management 34 | 50, 59, 64, 72, 73, 112, 116 |
| Data Access v, 73, 111, 126 | InPort User Roles 33 | Technical Support 2 |
| Data Attribute 111 | Issues iii, v, xi, 2, 48, 50, 53, 57, 59, 61, | Time Frames xi, 47, 50, 53, 59, 61, 64 |
| Data Quality v, xi, 48, 50, 53, 57, 59, | 64, 69, 70, 112 | 67, 112 |
| 62, 64, 70, 71, 111, 126 Downloads v, xi, 48, 50, 53, 57, 60, 62, | | Tool Tips 21 |
| 64, 74, 111 | J | • |
| | JInitiator 9 | U |
| F | | URLs v, viii, xi, 47, 50, 53, 57, 59, 61, |
| FAQs v, vii, xi, 48, 50, 53, 57, 60, 62, | L | 64, 66, 112 |
| 64, 75, 111, 125 | Libraries 29 | User Roles Report 40 |
| FIS 121 | login 11 | User Setup 25 |
| Fisheries Information System 121 | - | |
| | M | |
| G | Metadata Assistance 2 | |
| Geographic Area v, xi, 48, 50, 53, 57, | Metadata Batch Loading 95 | |
| 64, 68, 111 | Copy Batch File to InPort Catalog | |
| Glossary Terms v, xi, 48, 50, 53, 60, 62, | 104 | |



Still To Be Added

| <insert help="" navigator=""></insert> |
|--|
| < insert general description of the how the Catalog Editor is functionally organized $>$ 43 $$ |
| < How to delete catalog items: need to address various rules on item deletion $>$ 44 |
| < update definition for Data Use Constraints> |
| <insert -="" image="" load="" loader,="" tab="" tc=""></insert> |
| < insert Image - tc loader, validate tab> |
| < insert Image - tc loader, edit tab> |
| < insert Image - tc loader, catalog tab> |
| <insert form="" inport="" library="" of="" pdf="" request=""></insert> |

